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Lightroom

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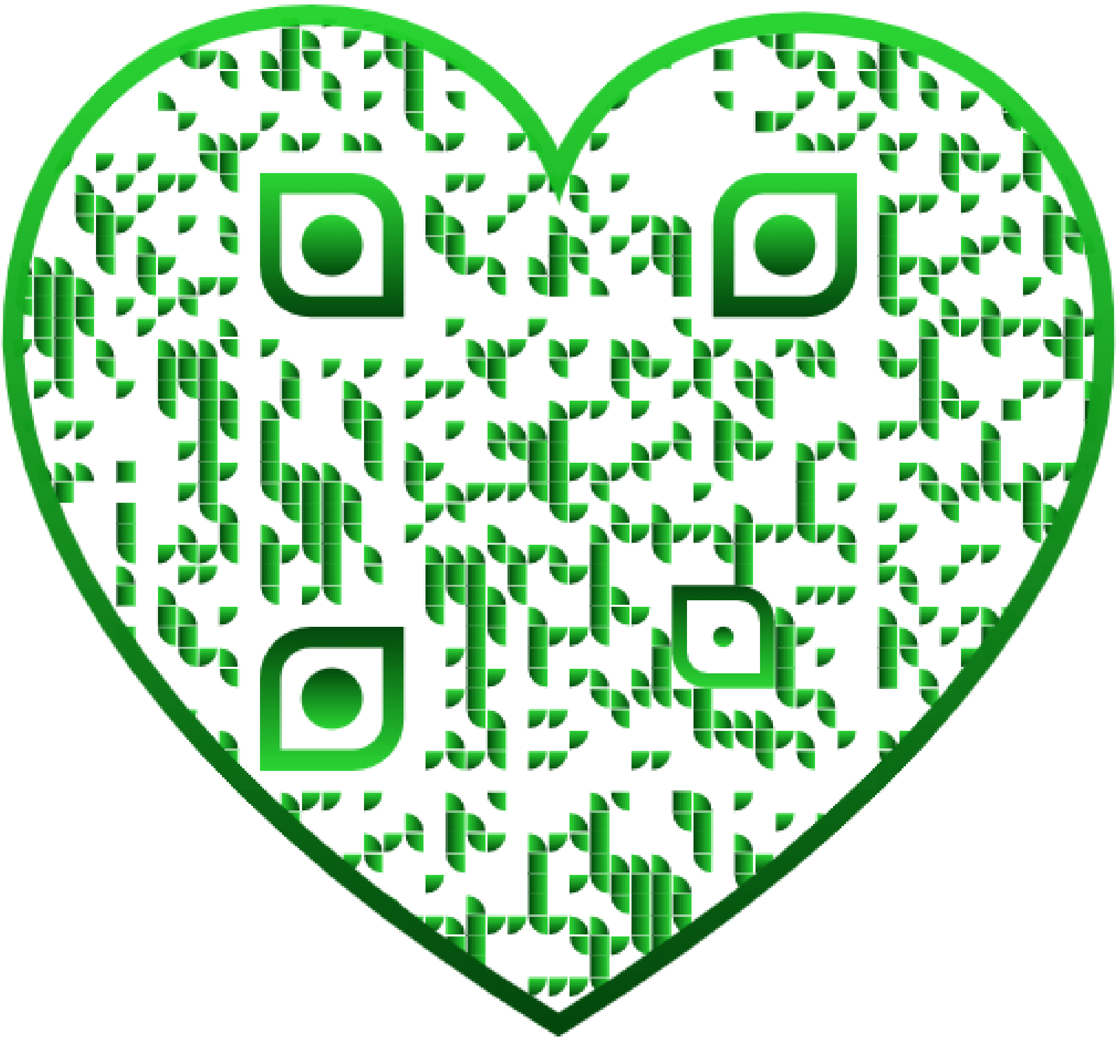

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ADOBE Lightroom Complete Manual

Welcome to one of the most powerful photo processing programs around!

Adobe Lightroom is a powerful and feature packed photo processor and image organiser designed to help photographers shoot, catalogue, edit, print and publish their images. In this series we take you through every aspect of using the desktop focused Adobe Lightroom Classic, including processing, printing and publishing your finished photographs. We also introduce you to Lightroom, which is a cloud based photo service that takes the essential tools you are used to using in the desktop version and gives you a mobile focused version that is still packed with the powerful features and tools that you would come to expect from such a popular class-leading program. Lightroom, in all its forms, is a powerful app that can help you to get the best out of your photos. Whether you want to use the classic desktop version or prefer to use the mobile cloud based software, we're here to show you how you can make your photos look amazing!

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The History of Lightroom

Let's take a closer look at the development of Adobe's specialist app for photographers, Adobe Photoshop Lightroom.

Ever since digital cameras first became popular in the early 1990s, photographers have sought ways to adjust and improve digital images and replicate the darkroom tricks and techniques that film photographers have used for decades to get the most out of their pictures. There are dozens of digital image editing programs available and almost everyone who's ever taken a digital photo, whether they use a top-end digital SLR or just the camera on their mobile phone, has used some sort of editing software to adjust and enhance the image. Most smartphones come with some sort of image editing app as a standard feature.

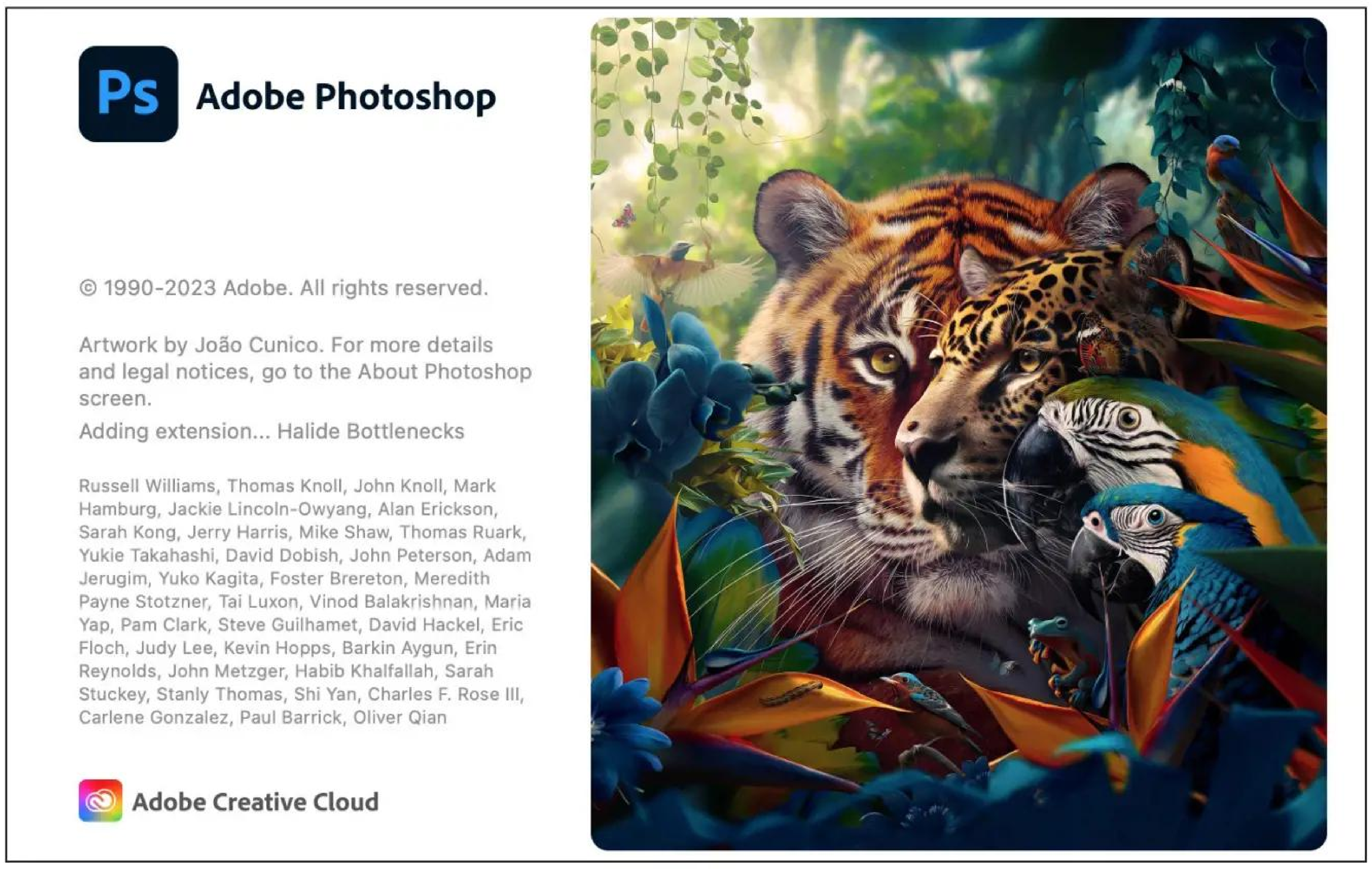
Adobe Photoshop

For more than two decades the industry standard for image editing software has been Adobe Photoshop and ever since it was first introduced in 1990 it has been the go-to program for professional photographers. The editing tools that you take for granted in your smartphone app were all inspired by tools first introduced in Photoshop.

Photoshop is an amazing piece of software and in skilled hands it is capable of making almost any adjustment or alteration imaginable to a digital image. However, in recent years Adobe has expanded Photoshop's capabilities to include elements such as video editing, 3D texturing and text editing, making what was already a very complex program even more difficult to master.

> "...it was clear that a new app was needed, that catered more specifically to the needs of photographers."

Of course, these expanded capabilities have been reflected in the ever-increasing price, making Photoshop a very expensive piece of software indeed. Nobody likes to pay for something they're not using and photographers found that most of Photoshop's expanded features were surplus to their requirements; so it was clear that a new app was needed, that catered more specifically to the needs of photographers. This was the remit under which Adobe Adobe Lightroom was developed.



Ps Adobe Photoshop

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Adding extension... Halide Bottlenecks

Russell Williams, Thomas Knoll, John Knoll, Mark Hamburg, Jackie Lincoln-Owyang, Alan Erickson, Sarah Kong, Jerry Harris, Mike Shaw, Thomas Ruark, Yukie Takahashi, David Dobish, John Peterson, Adam Jerugim, Yuko Kagita, Foster Brereton, Meredith Payne Stotzner, Tai Luxon, Vinod Balakrishnan, Maria Yap, Pam Clark, Steve Guilhamet, David Hackel, Eric Floch, Judy Lee, Kevin Hopps, Barkin Aygun, Erin Reynolds, John Metzger, Habib Khalfallah, Sarah Stuckey, Stanly Thomas, Shi Yan, Charles F. Rose III, Carlene Gonzalez, Paul Barrick, Oliver Qian

Adobe Creative Cloud

Shadowland

Mark Hamburg is a veteran software engineer who has been working at Adobe since 1990 and, along with Thomas Knoll, was part of the original team behind the development of Photoshop. In 1999 Hamburg started working on a new project codenamed Shadowland (a reference to a k.d. lang album, of all things). He brought on board Andrei Herasimchuk, the interface designer responsible for the distinctive look of Adobe Creative Suite, and development was started later that year.

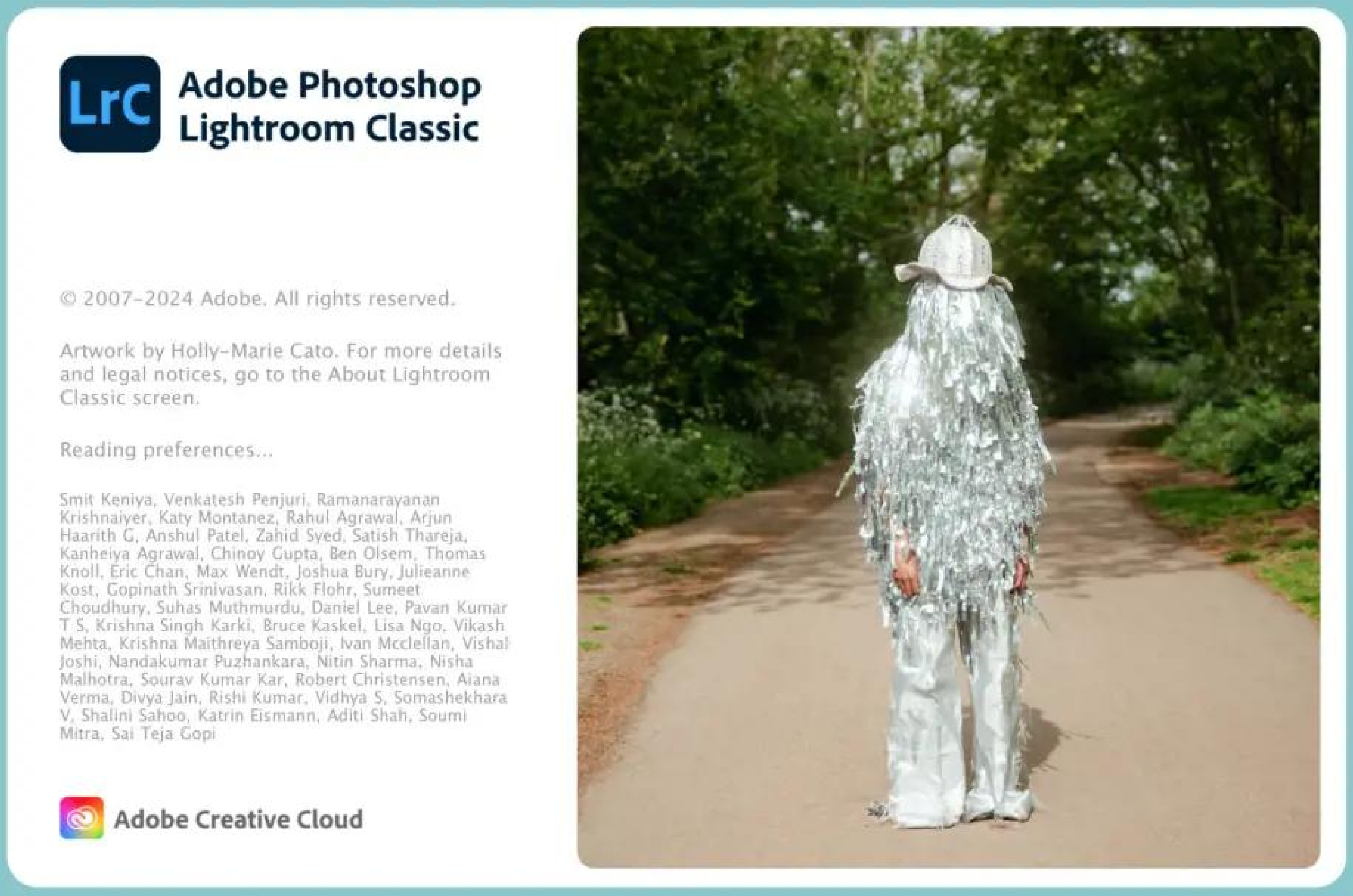
Some people are under the impression that since it's officially named Adobe Adobe Lightroom, it is essentially just a repackaged version Photoshop with some of the features removed, but this is not true. Hamburg, Herasimchuk and their team wrote the new program virtually from scratch, even writing a large portion of it in a completely different coding language. Initial development took three years and in 2002 Hamburg was able to demonstrate an early version of the program. An interface was added the following year and in 2004 full scale development started at Adobe's development facility in Minnesota.

In early January 2006, Adobe took the unusual step of releasing a beta version of their new program for public evaluation, initially on Apple Macintosh computers only, and used customer feedback to continue development of the program.

Further beta versions followed later that year, adding new features, including support for Microsoft Windows in July, and integration with Adobe Photoshop in September. Finally, the full retail version of Adobe Adobe Lightroom 1.0 was announced in January 2007 and released to the general public the following month.

Lightroom Classic

Over the years since its initial release as a stand-alone product, there has been major stand-alone versions released and multiple minor sub-version updates. Then Adobe launched its subscription based Creative Cloud service. You were able to choose from the entire suite of Adobe Products either singly, or in various packages. Adobe Photoshop Lightroom CC (2015) as it was initially called, has received various updates over the years of its release and at the time of writing is in the stable release version 13.4 as of mid-June 2024. It is now known as Adobe Photoshop Lightroom Classic and is the powerful desktop-focused version of the app. It is widely regarded as the go-to app for serious photographers.


Adobe Photoshop
Lightroom Classic

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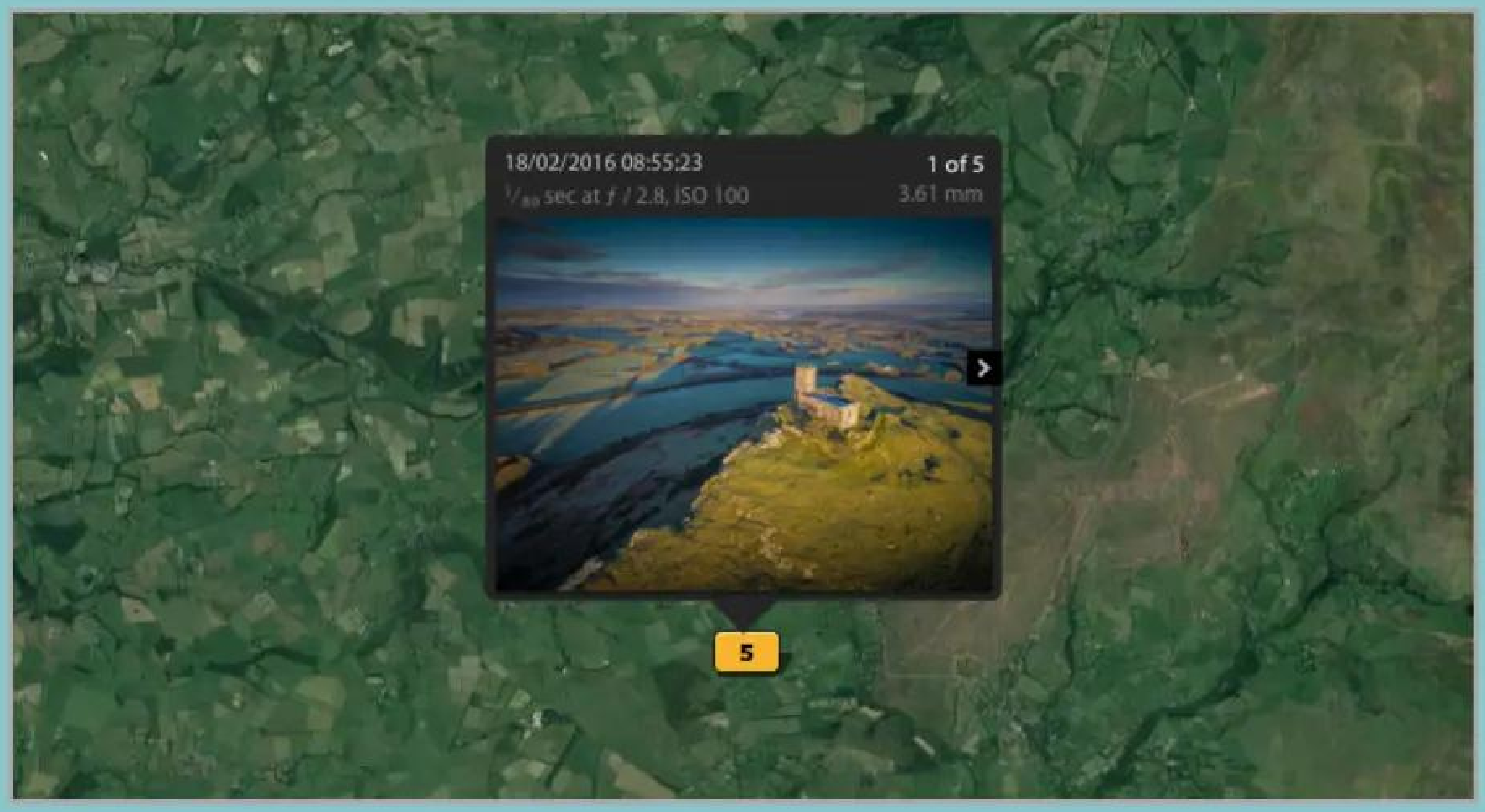
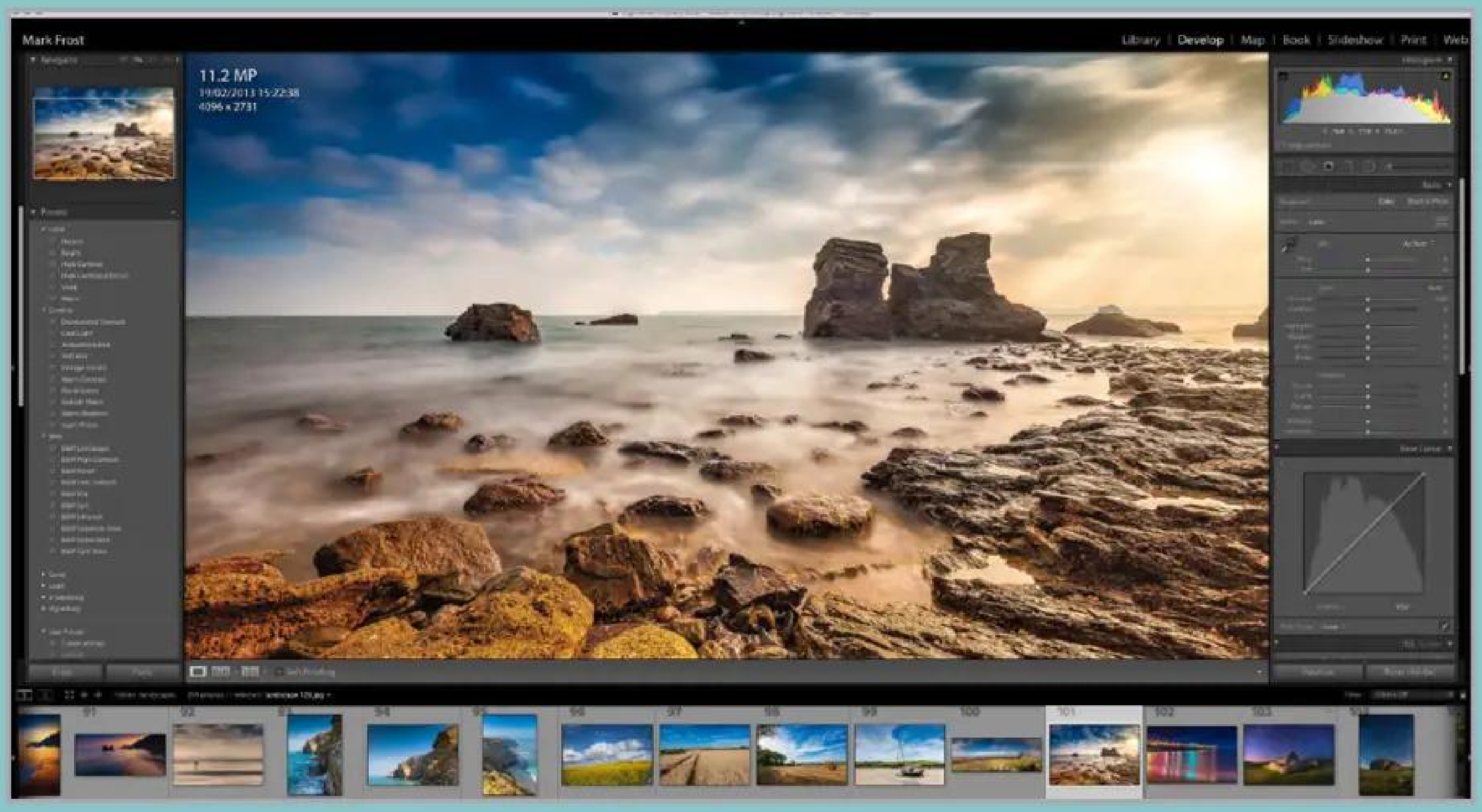
Reading preferences...

Smit Keniya, Venkatesh Penjuri, Ramanarayanan Krishnaiyer, Katy Montanez, Rahul Agrawal, Arjun Haarith G, Anshul Patel, Zahid Syed, Satish Thareja, Kanheiya Agrawal, Chinoy Gupta, Ben Olsem, Thomas Knoll, Eric Chan, Max Wendt, Joshua Bury, Julieanne Kost, Gopinath Srinivasan, Rikk Flohr, Sumeet Choudhury, Suhas Muthmurdu, Daniel Lee, Pavan Kumar T S, Krishna Singh Karki, Bruce Kaskel, Lisa Ngo, Vikash Mehta, Krishna Maithreya Samboji, Ivan Mcclellan, Vishal Joshi, Nandakumar Puzhankara, Nitin Sharma, Nisha Malhotra, Sourav Kumar Kar, Robert Christensen, Aiana Verma, Divya Jain, Rishi Kumar, Vidhya S, Somashekhara V, Shalini Sahoo, Katrin Eismann, Aditi Shah, Soumi Mitra, Sai Teja Gopi

Adobe Creative Cloud



The Map Module is a great addition to recent versions. Utilising GPS technologies, you're able to stamp location specific metadata to your photos.



Lightroom easily imports your photos from many different sources. You can create Collections, add Presets and custom Filters to each or all of your images.

Lightroom

Adobe Photoshop Lightroom was launched in 2007 and at the time of writing is in its stable release version 7.4.1 as of early Summer 2024. Adobe Photoshop Lightroom is a mainly cloud-based photo service which caused a bit of a stir at its release but now also works with local storage too. Not only was it an unexpected new product, it was a much pared down version of its much more fully-featured cousin Lightroom Classic. You can work on images in the cloud via laptop or mobile apps and also edit and save locally if you prefer, or copy to the cloud.

There is no doubt it is a faster and more streamlined product for enthusiasts to use across multiple mobile platforms, but if you are a professional photographer, then Lightroom Classic might be your better option.

Adobe Photoshop
Lightroom

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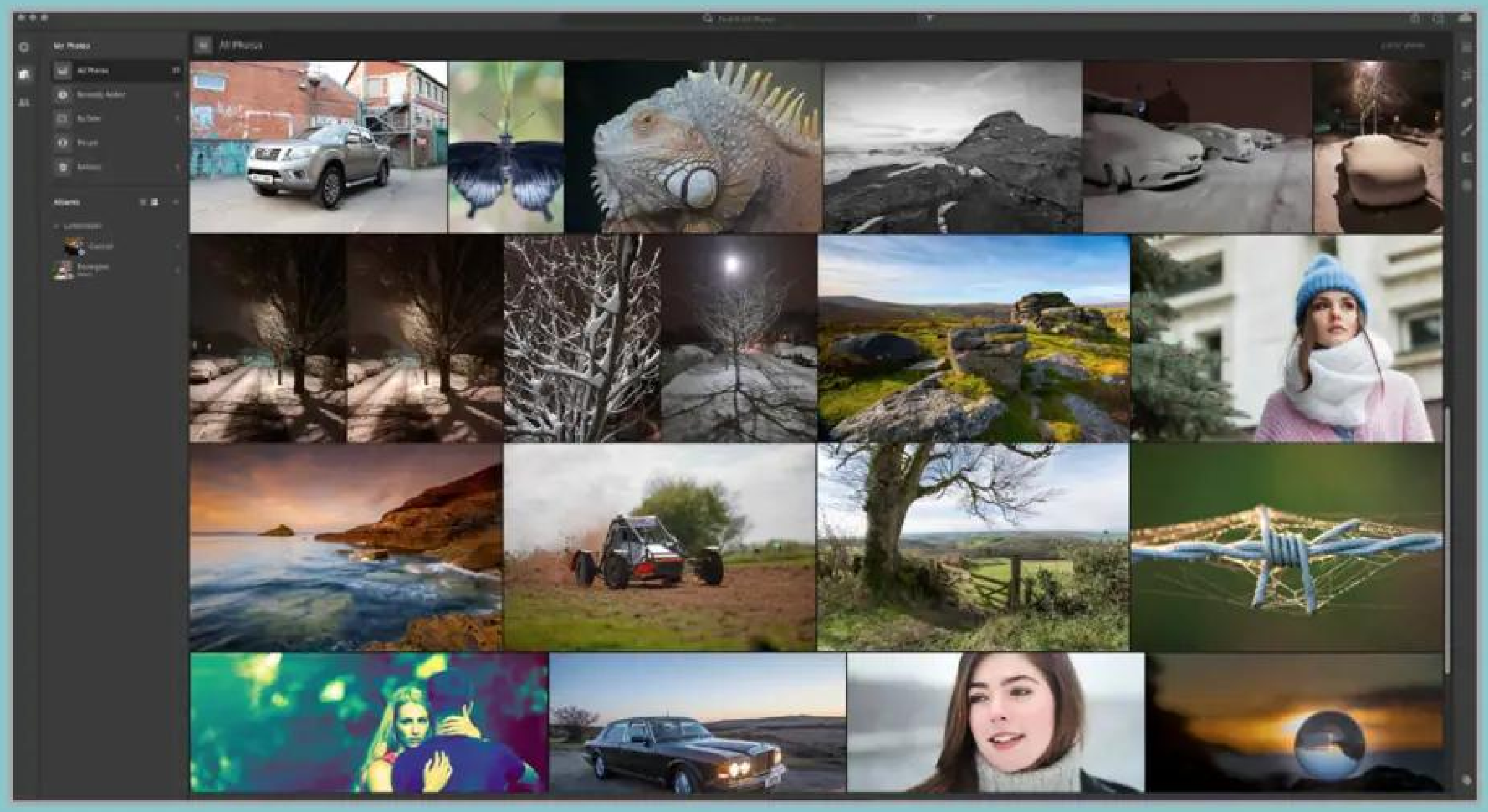
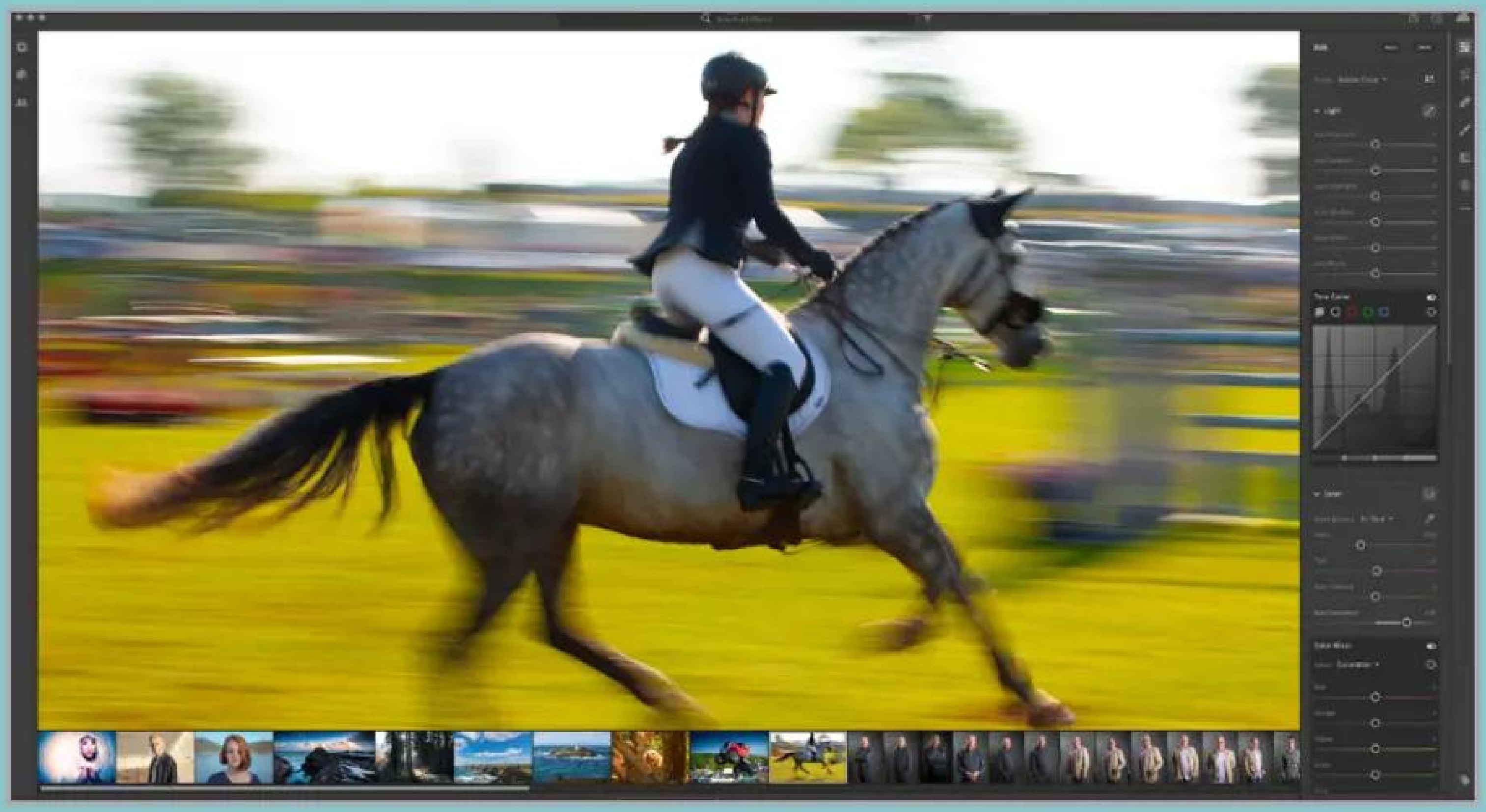
Adobe Creative Cloud



The Lightroom interface is a much simpler affair, designed to be less cluttered with just the main tools for processing your images and adding keywords.



Apart from basic exposure adjustments, you can crop, heal and add graduated and radial filters. There are also a number of Presets for one-click adjustments.

Lightroom Versus Photoshop

At some point in your digital image editing life you're going to face the question: Lightroom or Photoshop? It's not always an easy answer though as it depends on what it is you want to achieve. Both are heavyweights in the photographer's toolbox, but which is right for you?

Lr or Ps?

It's not always an easy choice but there are vast differences between Lightroom and Photoshop that can help make your mind up. These differences depend on the situation and what you intend to do with the finished product. Let's break down a few strengths of each.

Lr VS Ps

Lightroom Classic Strengths

- **Lr** Lightroom can manipulate and edit Raw files directly from your camera, without the need to install or use another plugin.
- **Lr** Workflow and image management is one of Lightroom's main draws. You can easily import, organise, edit and manage each of your images without too much in-depth knowledge of advanced design techniques.
- **Lr** There are less features than with Photoshop, which lessens its learning curve and thanks to a well-planned user interface, it's relatively easy to adapt to if you're already familiar with other photo editing tools.
- **Lr** Lightroom has an impressive number of presets available to the user. Exposure levels, contrast, toning, colour presets, video presets, effects and many more are readily available via the Navigator.
- **Lr** You can arrange the images you've imported by keyword, tags and metadata. You can easily publish finished work and there are many more under-the-hood tools and preferences to play around with.
- **Lr** You don't have to dive into the program's inner workings to see great results. Most of the common functions that provide you with a superb image are just a few clicks away, and available on the surface of the interface.

Photoshop Strengths

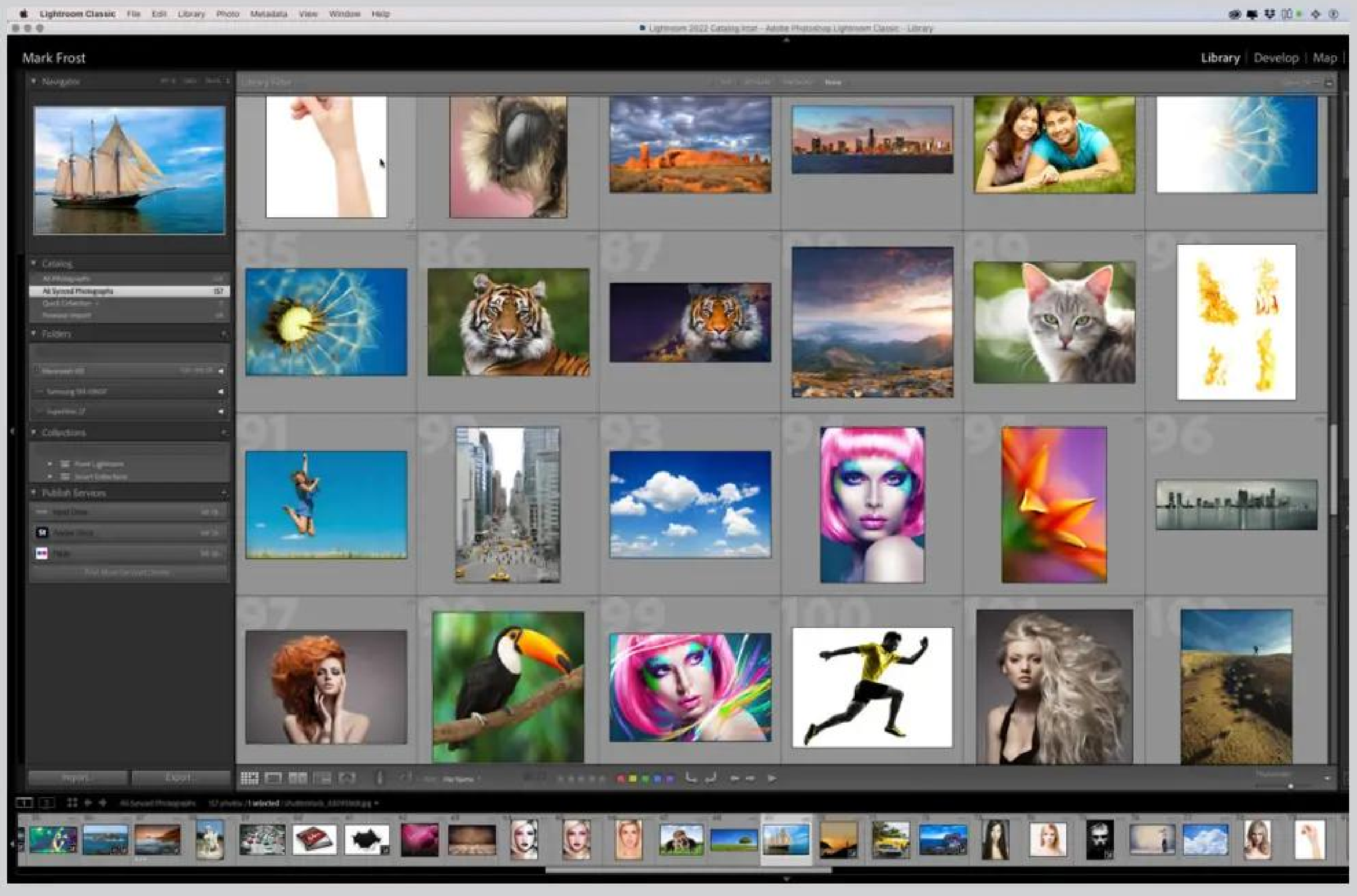
- **Ps** Photoshop is a pixel-level editor. Where Lightroom allows you to adjust pixels in an image, Photoshop lets you move them and manipulate them in a way that's nothing short of magical.
- **Ps** Photoshop allows multiple layers to be applied to an image. You can keep images and edits on separate layers, and modify them accordingly and independently. This is the basis of non-destructive editing.
- **Ps** It's huge. Mind-bogglingly huge. The toolbox alone is the stuff of legend and contains just about everything the professional designer and photographer would ever need from a piece of software.
- **Ps** You can record specific actions within Photoshop, allowing you to apply those actions to other images with a click of a button.
- **Ps** You're able to blend many different layers together, masking areas of an image to protect it from being edited, even down to the pixel level.
- **Ps** Almost anything is possible in Photoshop. If you can imagine a scene, then you're able to turn your wedding photos into a dramatic space battle or have a picture of the kids playing with a T-Rex. Remove objects, add objects, touch up skin tones, the list goes on and on.

So which one should I use?

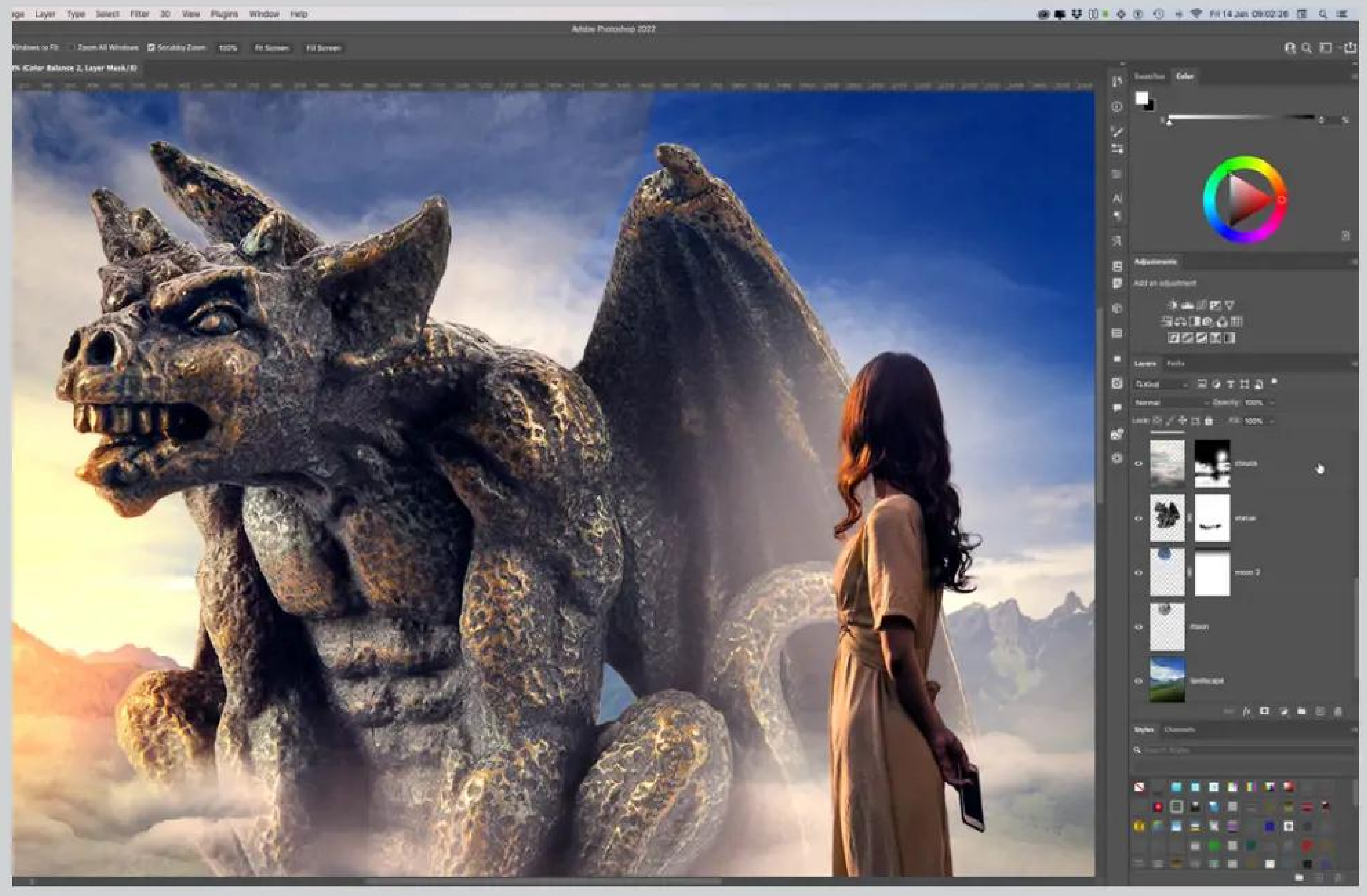
In short, Lightroom is designed for photographers. It's a powerful image management tool that you can use to quickly organise and edit your photo collection. Most photographers will utilise Lightroom's features over that of Photoshop, but that's not to say it's the only tool they'll use.

The beauty of both products is that where one reaches the limit of what it can do for a photographer's workflow, the other can then step in and take up the baton to get the image to its finished state. Once you've used up Lightroom's features and you want to do more with an image, then you can take it over to Photoshop for that intricate level of control and possibly image enhancement and manipulation.

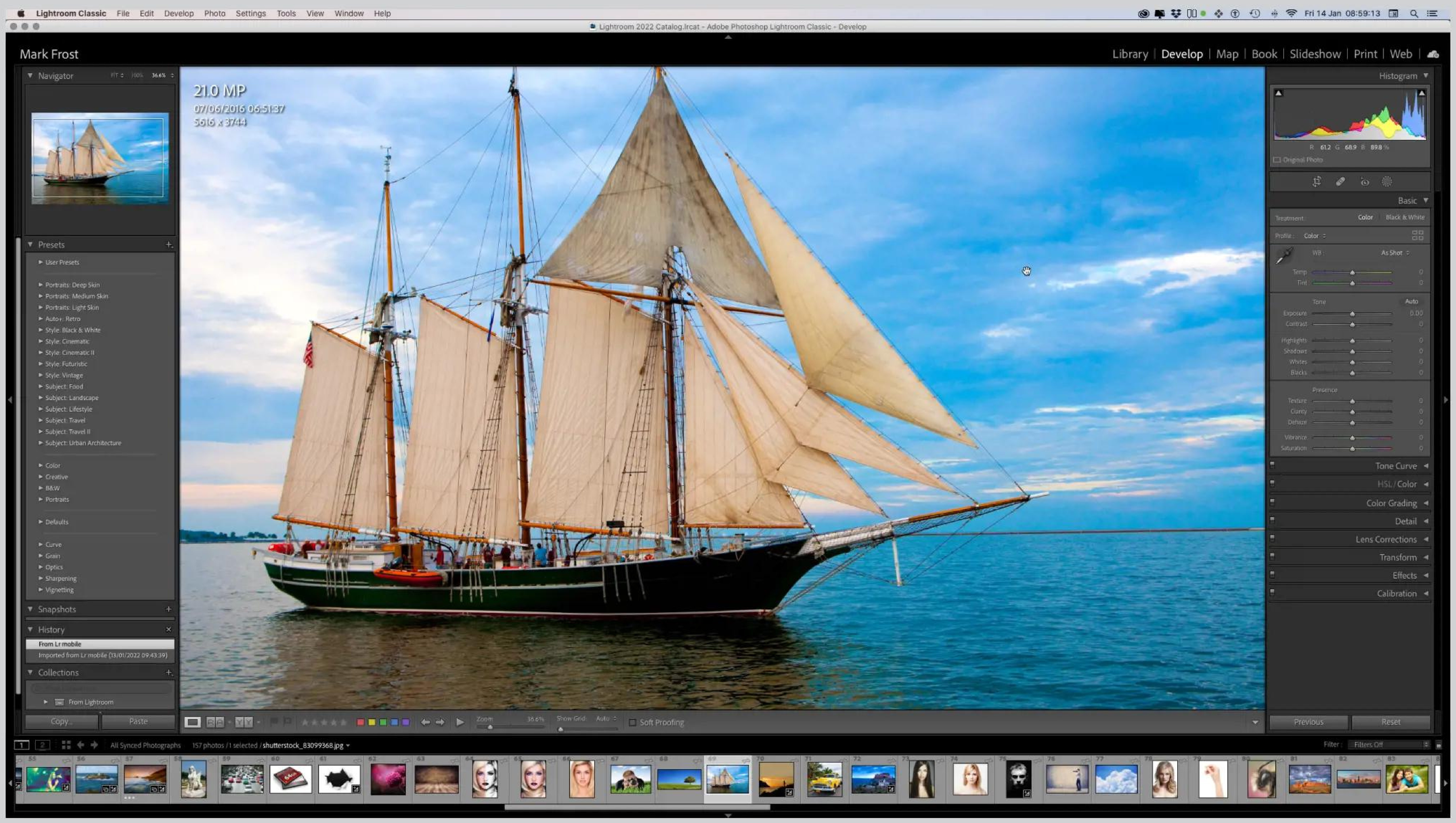
It makes sense to do as much processing work in Lightroom as you can to get it as close to completion as possible. Photoshop can then let you do any layer-based editing on top of that. Both programs are an integral part of the design process and workflow, but for the sake of this book and photographers the world over, we're opting to start your post-processing adventure with Lightroom.



Lightroom is a great image editor and organiser, and is remarkably easy to use, considering how powerful it can be.



Photoshop has an incredible array of benefits on offer; with it you can just about do anything your imagination comes up with.


Lightroom Classic
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Presets
Snapshots
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Collections
Basic
Tone Curve
HSL / Color
Color Grading
Detail
Lens Corrections
Transform
Effects
Calibration
Copy...
Paste
Soft Proofing
Previous
Reset

Most photographers will use Lightroom for their post-processing, moving to Photoshop for advanced techniques and edits.

Get Started with Lightroom Classic

Before we start looking at organising, editing and publishing photos, let's take a moment to understand what Adobe Lightroom is all about; how it differs from Photoshop, how you download and install it and how you get started with importing your photos into the app for processing. Your journey starts here!

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Explaining Lightroom versions
Lightroom versus Photoshop
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Remove photo context menu
Before and after: Using filters

Exploring the Workspace

The default workspace you view when launching Lightroom can look a little confusing to begin with. However, with a little exploration the many menus and options soon become second nature. Here, we show you around all the basic areas before you get stuck into editing.

1 Lr

This is the Identity Plate for Lightroom, displaying the user's logged in account name, with further options available to be expanded that connect to Adobe's cloud services. The Identity Plate can be further personalised, using either set templates or customising your own for branding your own photos. These can be text-based, or even a graphical Identity Plate to add that little extra personal touch to your Workspace view and image edits.

2 Presets: Catalog

The Catalog Preset is a database that stores a record for each of your photos. This record contains key pieces of information regarding each of the photos you import into Lightroom, such as a reference to where the photo is stored on your system, instructions for how to process the photo and metadata relating to the photo.

3 Presets: Folders

The Folders Preset displays where your photos are stored in the system. These reflect the folder structure on the drive itself and appear in an alphanumeric order for you to browse through. The triangles can be expanded to display sub-folders within each root folder level and each folder will display the number of images or videos you've imported into Lightroom; there's also information on the amount of space on the hard drive that the images have taken up, with the total space displayed too.

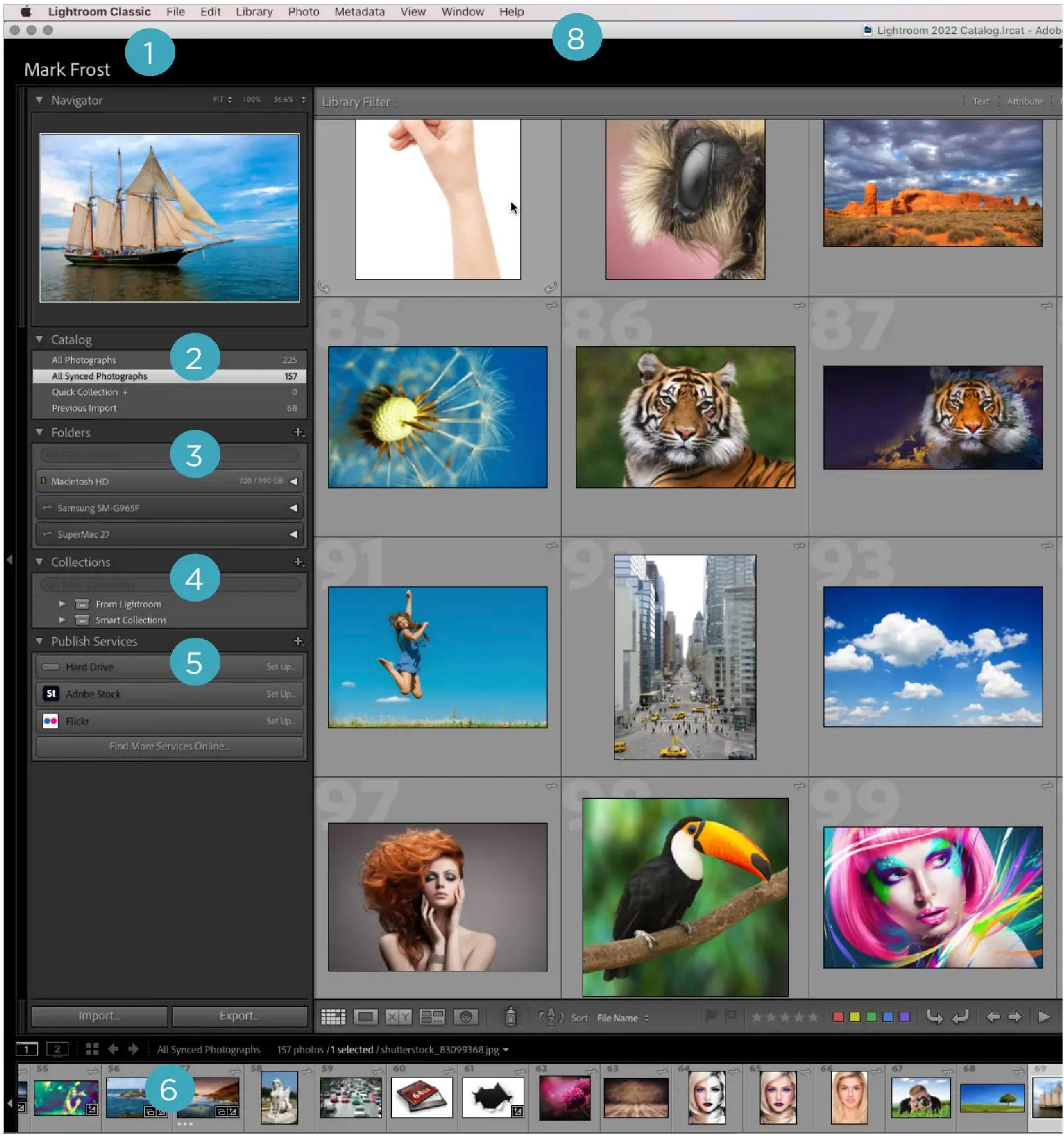
Lightroom Classic
File
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Photo
Metadata
View
Window
Help
Lightroom 2022 Catalog.lrcat - Adob
Mark Frost
1
8
Navigator
Library Filter :
Catalog
All Photographs
All Synced Photographs
Quick Collection +
Previous Import
2
Folders
3
Macintosh HD
Samsung SM-G965F
SuperMac 27
Collections
4
From Lightroom
Smart Collections
Publish Services
5
Hard Drive
Adobe Stock
Flickr
Find More Services Online...
Import...
Export...
Sort: File Name
All Synced Photographs
157 photos /1 selected /shutterstock_83099368.jpg
6

4 Presets: Collections

Collections provide a way for Lightroom to group photos in one place for easy viewing, or for performing a variety of tasks. For example, to assemble photos into a slideshow collection, or a web photo gallery. You can create as many Collections as you need from Regular, Smart and Quick Collection listings. These can store custom defined rules, temporary groups and various other clever features.

5 Presets: Publish Services

The Publish Services options menu allows you to export collections of photos to your hard drive or a variety of defined online services, such as popular social networks as Facebook and Flickr. Additional information can be added to the export process and you can find more services online via the available button. It's even possible to publish entire folders or collections of photos, reducing the process considerably compared to manual uploads. These can be used in much the same way as the Collections, with various options and custom defined rules if needed.

6 Film Strip

The Film Strip view bar is where you can quickly display and also access the photos you are working on as you move between the modules. This scrolling bar contains photos and all images from the currently selected Library folder, your photo/image collection, or keyword set. By using this option you can quickly access your images without having to open additional folders outside of the Lightroom software. You can quickly and easily move between each of the photos in the Filmstrip using the Left and Right Arrow keys or by choosing a different source from the Filmstrip Source Indicator pop-up menu to the right of the navigation buttons.

7 Histogram and Adjustment Panels

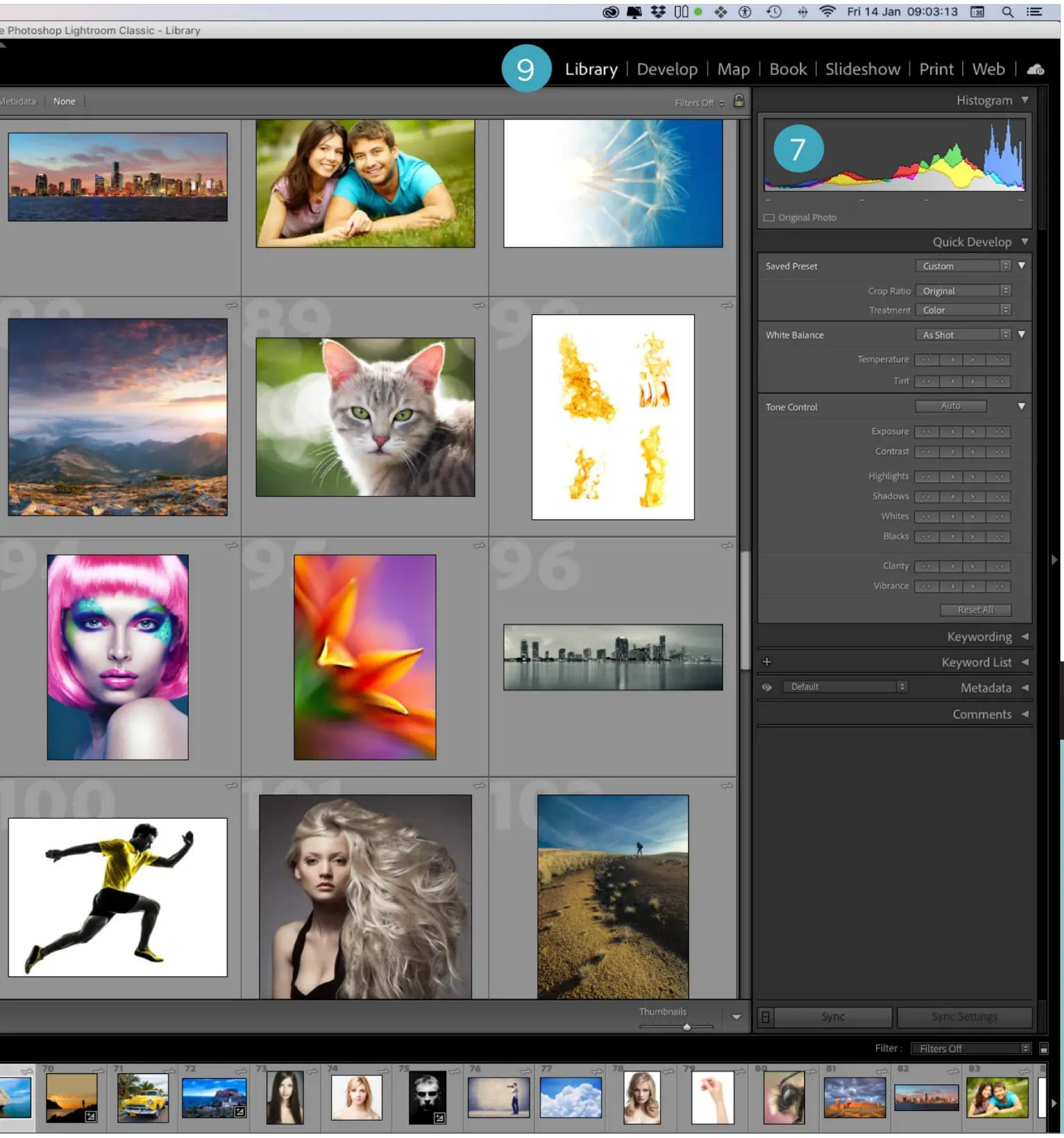
The Histogram is an often overlooked feature of Lightroom, which is a shame as it's an extraordinarily useful tool to master. However, we have covered this and these areas will be looked at in further detail as we move through the various Lightroom modules, such as the Develop Module and other elements of the software in this book.

8 Top Toolbar

The top toolbar contains the familiar aspects of a traditional program, with File, Edit, Library, Photo, Metadata, View, Windows and Help. Most of these are self-explanatory, and function in the same was as any other program. Others though, contain elements and options to enhance each of the modules. You could spend a lot of time trawling through the many different menu options and we cover many of them throughout this book. For now though, take a moment to explore what's available and see just how in-depth Lightroom can get with just a few clicks of the Mouse button.

9 Modules

Lightroom has seven workspace modules available: Library, Develop, Map, Book, Slideshow, Print, and Web. Each module offers a unique set of tools and features tailored to your workflow: importing, organising and publishing, adjusting and enhancing and generating output for screen, print or web detail. These tools, within each Module, are startlingly powerful in their use, whilst still being relatively simple to use. We'll look at these Modules and the tools within, as we progress through the book.


Fri 14 Jan 09:03:13
Photoshop Lightroom Classic - Library
9
Library | Develop | Map | Book | Slideshow | Print | Web
Metadata None
Filters Off
Histogram
7
Original Photo
Quick Develop
Saved Preset Custom
Crop Ratio Original
Treatment Color
White Balance As Shot
Temperature
Tint
Tone Control Auto
Exposure
Contrast
Highlights
Shadows
Whites
Blacks
Clarity
Vibrance
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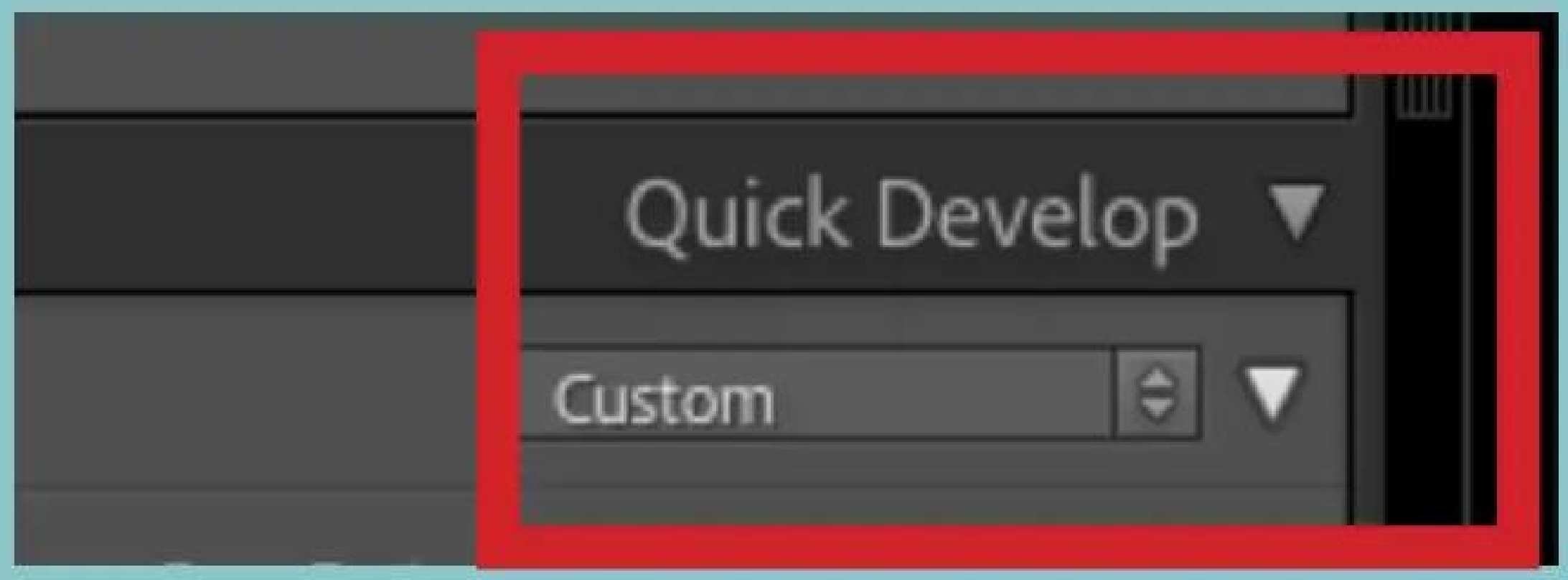
Metadata
Comments
Thumbnails
Sync
Sync Settings
Filter : Filters Off

Show or Hide Panel Groups


Quick Develop
Custom

- To show or hide a single panel group, click the triangular Show/Hide Panel Group icon. A solid icon indicates the panel group is showing.
- To show or hide both side panel groups, choose Window > Panels > Toggle Side Panels, or press the Tab key.
- To hide all panels, including side panels, the Filmstrip and Module Picker, choose Window > Panels > Toggle All Panels, or press Shift-Tab.

Shooting in Raw Mode

To get the best out of your digital images with Adobe Lightroom, you should always shoot in Raw Mode.

If you've bought this book, we can safely assume that you know something about digital photography, so you're probably already aware that the vast majority of digital images are stored in a file format known as JPEG. Nearly all digital cameras and mobile phones record their images as JPEG files. You can spot a JPEG file because it will usually have the filename extension .jpg or .jpeg. The JPEG format has been around since 1992, when the standard was first specified by the Joint Photographic Experts Group (after which it takes its name), a standing committee of imaging and software industry experts. There have been various attempts to update or replace the JPEG format over the years but it is now so entrenched in the digital world that it will likely be with us forever.

The JPEG format is great for digital images that are shared or published via the Internet or stored on digital media, because it is a compressed file format. File compression is a way of shrinking file sizes by removing redundant information and encoding the rest in a more efficient way. For digital images this means that a photograph that is maybe 35 megabytes as it comes off the camera sensor can be compressed down to a fraction of that size without losing too much image quality. This obviously means that you can store a lot more images on your memory card or hard drive and view your friends' photos on Facebook without using up your entire data allowance at once. Whilst a slight loss of image quality, as a trade-off for more efficient storage, is not a problem for the majority of users, professional photographers want the best images possible and so any loss of quality is unacceptable. For this reason, most high-end cameras have an option to store photos in an uncompressed format usually known as Raw mode.

AF-ON
Quality
RAW 21M 5616x3744 [ ]
RAW
–
RAW
SRAW1
SRAW2
JPEG
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L
L
M
M
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S
Canon
ON
OFF

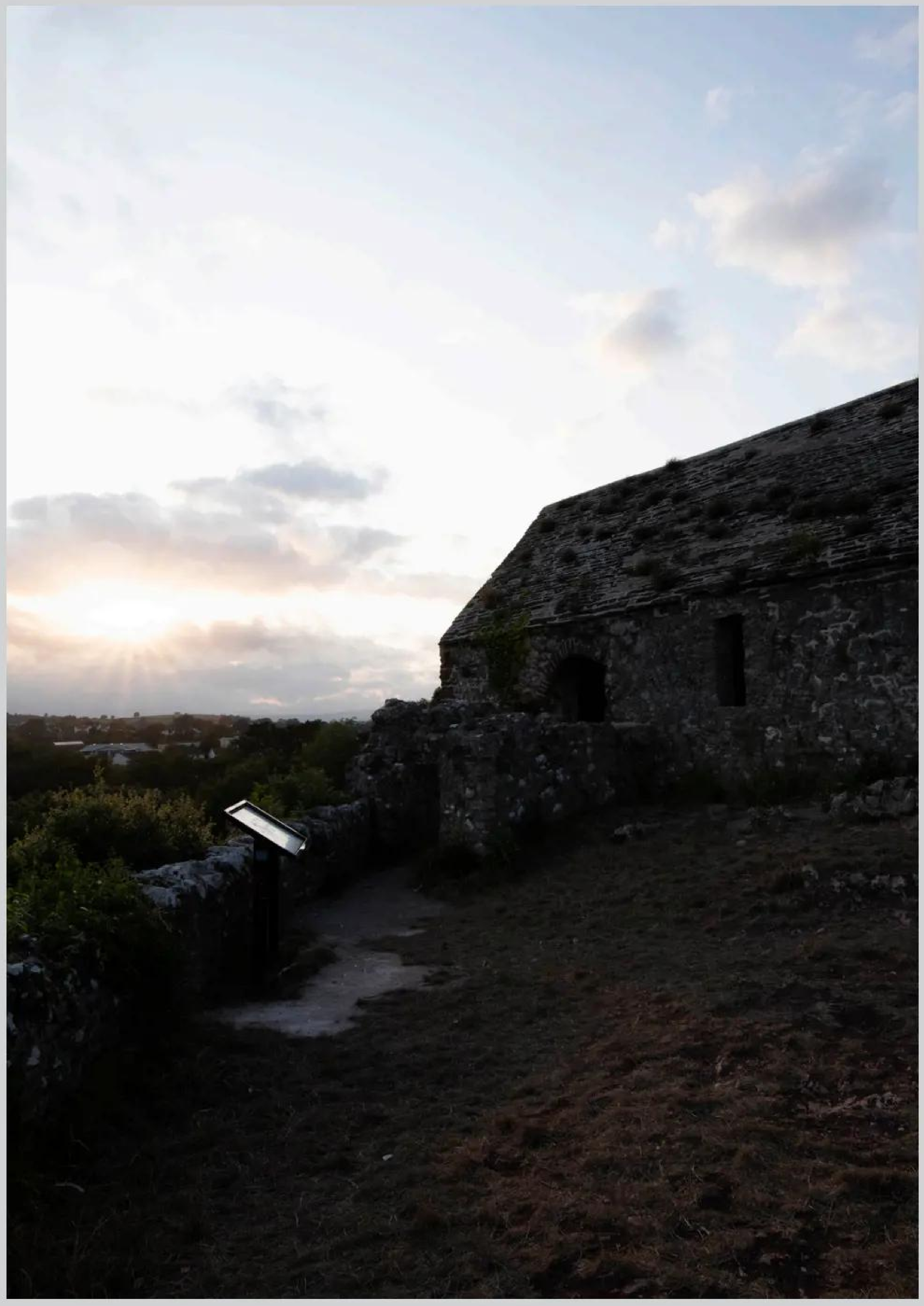
LV
AF
1 1196
2 3528
File Format
JPEG Recorded Pixels
JPEG Quality
RAW File Format
PEF
DNG
MENU Cancel
OK OK
WB
OK
INFO
MENU

Advantages of Raw Mode

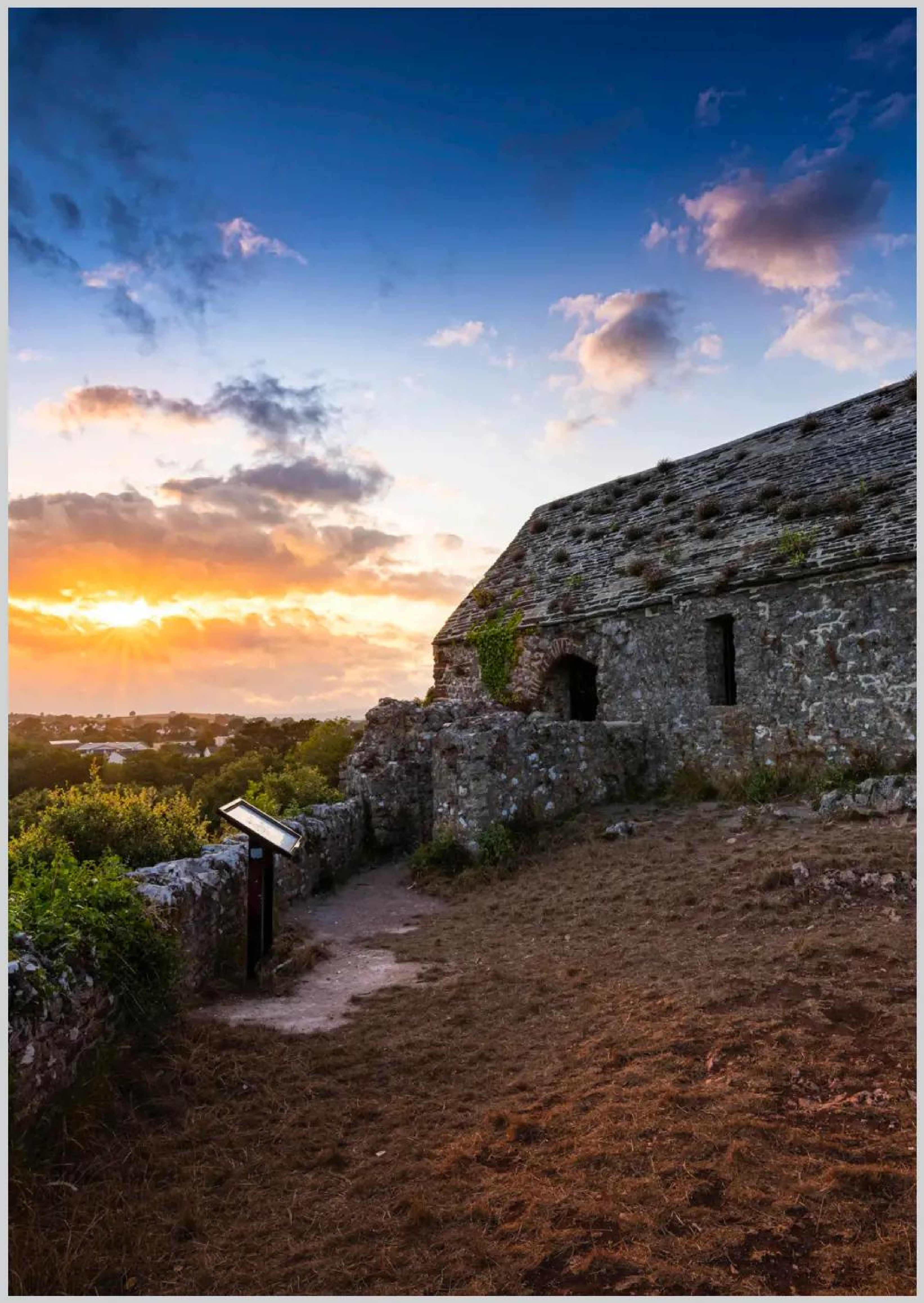
A full explanation of JPEG compression would take up much more space than we have available in this guide and you really don't need to know most of it. For our purposes, the major difference between JPEG and Raw mode is the amount of information used to describe each pixel in the image. In JPEG mode each pixel is described by 24 bits, that is 24 ones and zeros, 8 for each colour channel of red, green and blue. This 8-bit encoding allows 256 gradations of brightness per colour channel, meaning that it can display 256 x 256 x 256, or 16,777,216 different shades of colour. That might sound like a lot but if you look at a JPEG image of a clear blue sky you may still see lines between the different tones of blue rather than a smooth gradation of colour.

In uncompressed Raw mode, each pixel is usually described by 12 or even 14 bits per channel, giving 36 or 42 bits per pixel. This might not sound like a big difference but whilst a 12-bit Raw file can describe 68 billion shades, a 14-bit file can describe four trillion. This means that not only will your colours look smoother and more lifelike, much more shadow and highlight detail can also be recorded, giving your pictures much more dynamic range. This means that when you're processing a Raw mode shot you can pull out much more detail from shadows and highlights. See the sample photos shown here to see the difference.

Choose Raw Over Jpeg



This photo was shot using in-camera JPEG compression. As you can see there is almost no detail in the shadow areas and no amount of brightening can change that.



This is the same photo shot in Raw mode and processed in Lightroom. With the greater exposure, latitude and colour depth this mode provides, shadow detail and colour saturation are improved, producing a much nicer shot.

Disadvantages of Raw Mode

For day-to-day use there aren't many disadvantages to shooting in Raw mode. High capacity memory cards and multi-terabyte hard disks are now so cheap that storage capacity really isn't a problem and if you want to send a photo via email or share it online it's very simple to convert a Raw file into a more manageable JPEG. The only real disadvantage is that there is very little standardisation of Raw file types between different camera manufacturers, and all of them have their own proprietary formats. This means that when you buy a new camera you may find that Lightroom or Adobe Camera Raw won't be able to open or process the images until a compatibility update is released, which can sometimes take several weeks. One way around this is to use the Adobe DNG Raw format, which is an open-source Raw file format that is available on some cameras, notably Pentax DSLRs and some other high-end cameras. All Adobe software can handle this format by default. Adobe also offer a Raw to DNG converter that can batch-convert all your Raw files to the more compatible DNG format. The downside being that you then have native Raw and DNG versions of all your images.

Raw or RAW?

Most books, magazines, websites and even camera menu screens refer to Raw mode all in capital letters: RAW. There's really no reason for this as it's not an acronym and just means that you're recording the Raw uncompressed information from the camera's primary image processor. As far as we've been able to determine, the practice of writing it in caps started with a Canon press release circa 1998; and was carried on by other PR departments and camera journalists who didn't know any better. Since we do know better, in this book we're going to write it as 'Raw'.

L
L
M
M
S
S
RAW+L
RAW+L
RAW+M
RAW+M
RAW+S
RAW+S
RAW

1 2 3 4 5 6 7 8 9
MENU

Image Size L: 12M
Aspect Ratio 3:2
Quality RAW & JPEG
RAW File Type Uncompressed
Panorama: Size –
Panorama: Direction –

Importing Photos for the First Time

Before editing and improving your photos with Lightroom Classic, you need to import them into the program's database. Depending on the size of your collection this could take a while, so it's best to set aside some time.

Adobe Photoshop Lightroom Classic

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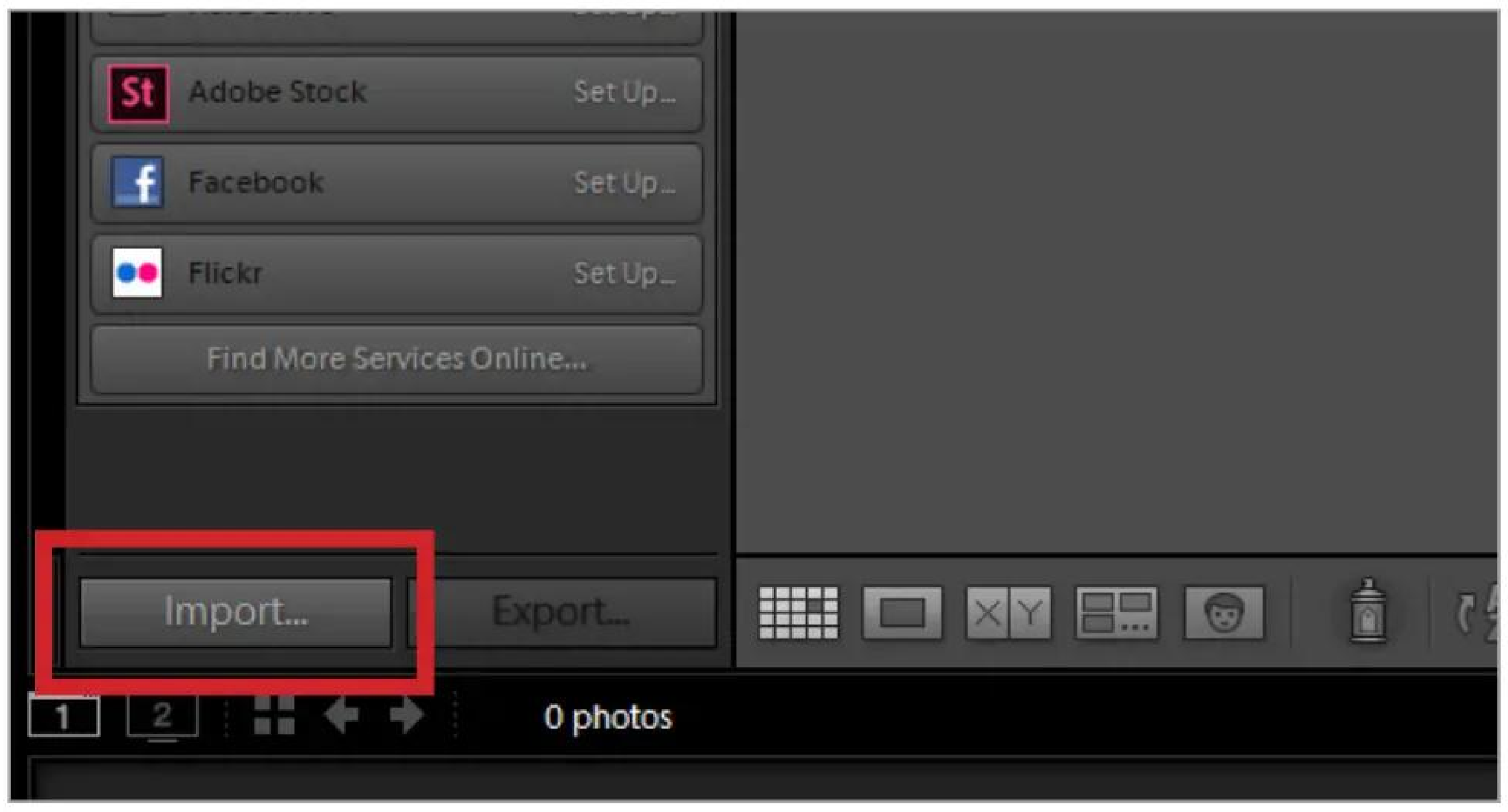
Artwork by Dani Guindo. For more details and legal notices, go to the About Lightroom Classic screen.

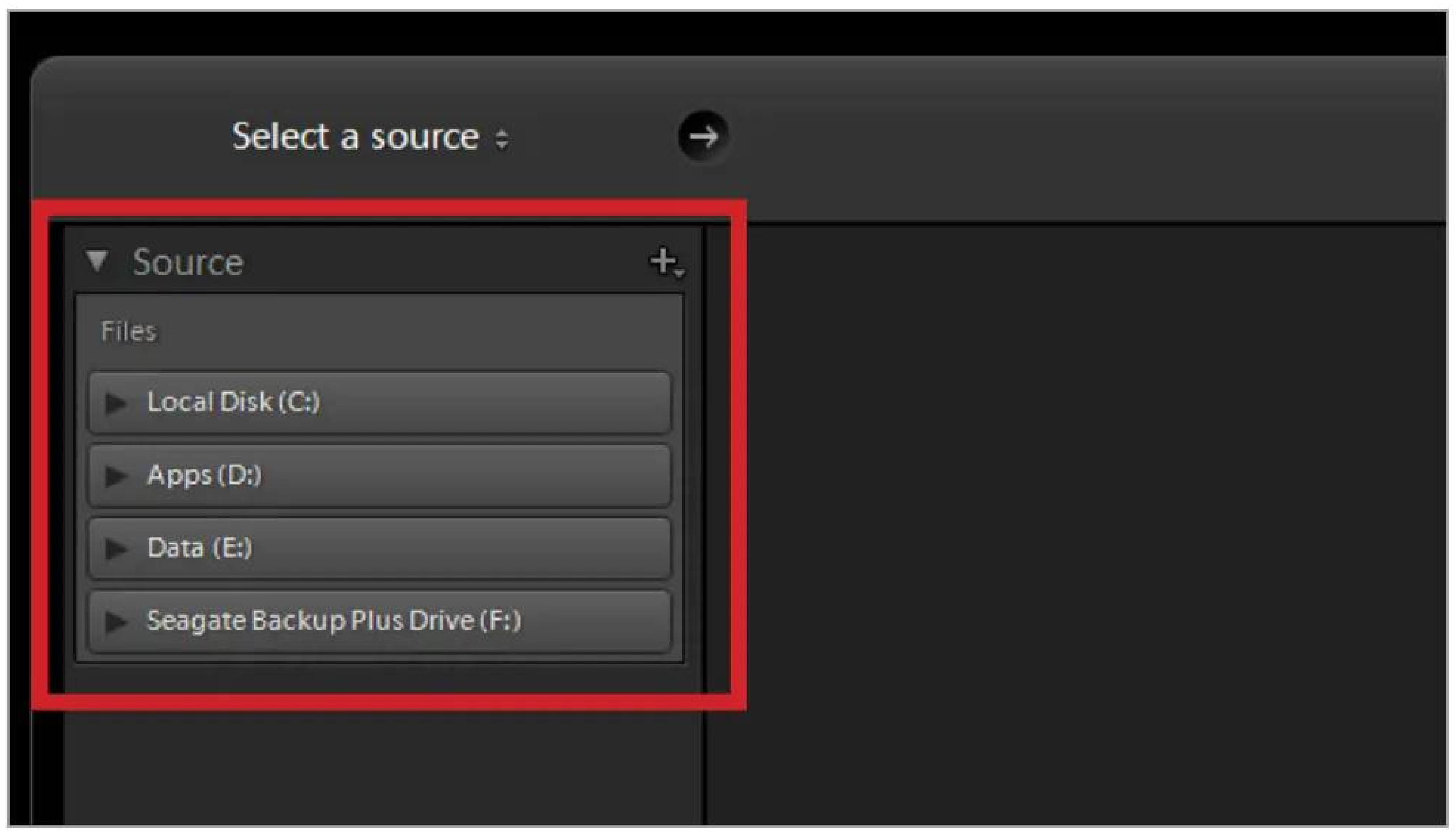
Reading preferences...

Becky Sowada, Chet Drarvik, Simon Chen, Benjamin Warde, Yuhong Wu, Jon Clauson, Ned Wright, Rani Kumar, Durga Ganesh Grandhi, Sunil Bhaskaran, Smit Keniya, Venkatesh Penjuri, Jayesh Viradiya, Ramanarayanan Krishnaiyer, Katy Montanez, Rahul Agrawal, Arjun Haarith G, Anshul Patel, Zahid Syed, Prabal Kumar Ghosh, Satish Thareja, Mayuri Jain, Kanheiya Agrawal, Chinoy Gupta, Ben Olsem, Thomas Knoll, Eric Chan, Max Wendt, Joshua Bury, Julieanne Kost, Gopinath Srinivasan, Rikk Flohr, Sumeet Choudhury, Suhas Muthmurdu, Daniel Lee, Pavan Kumar T S, Jeff Few, Krishna Singh Karki, Bruce Kaskel, Lisa Ngo, Vikash Mehta, Krishna Maithreya Samboji, Ivan Mcclellan, Vishal Joshi, Vijay Sankar G

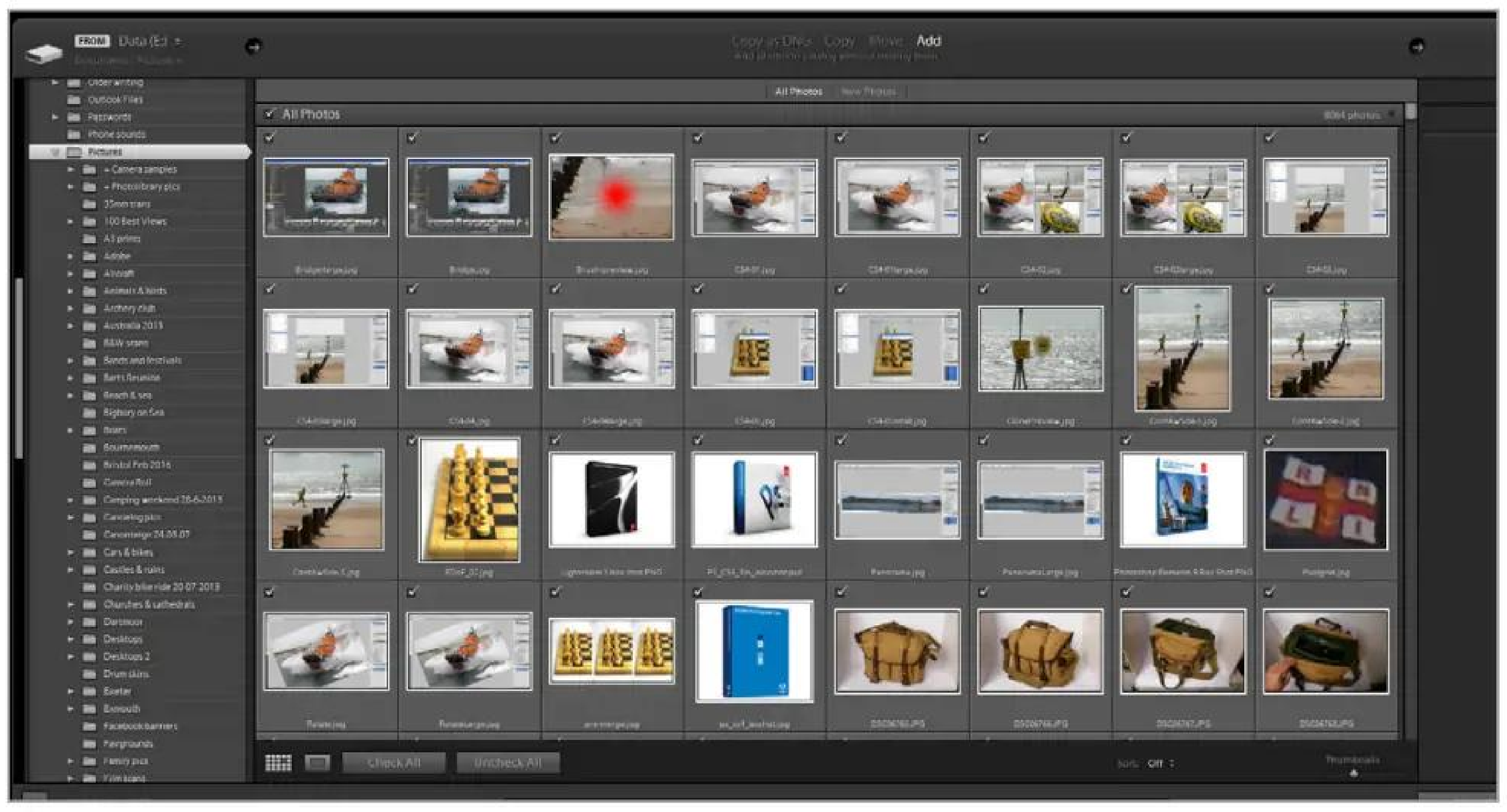
1 The first step after installing Lightroom Classic for the first time is to import your photos into the program's catalogue. Lightroom uses this catalogue to organise your photo collection and to help you find them by applying keywords and other search criteria. By keeping a separate database it means that the files on your hard drive are not affected.



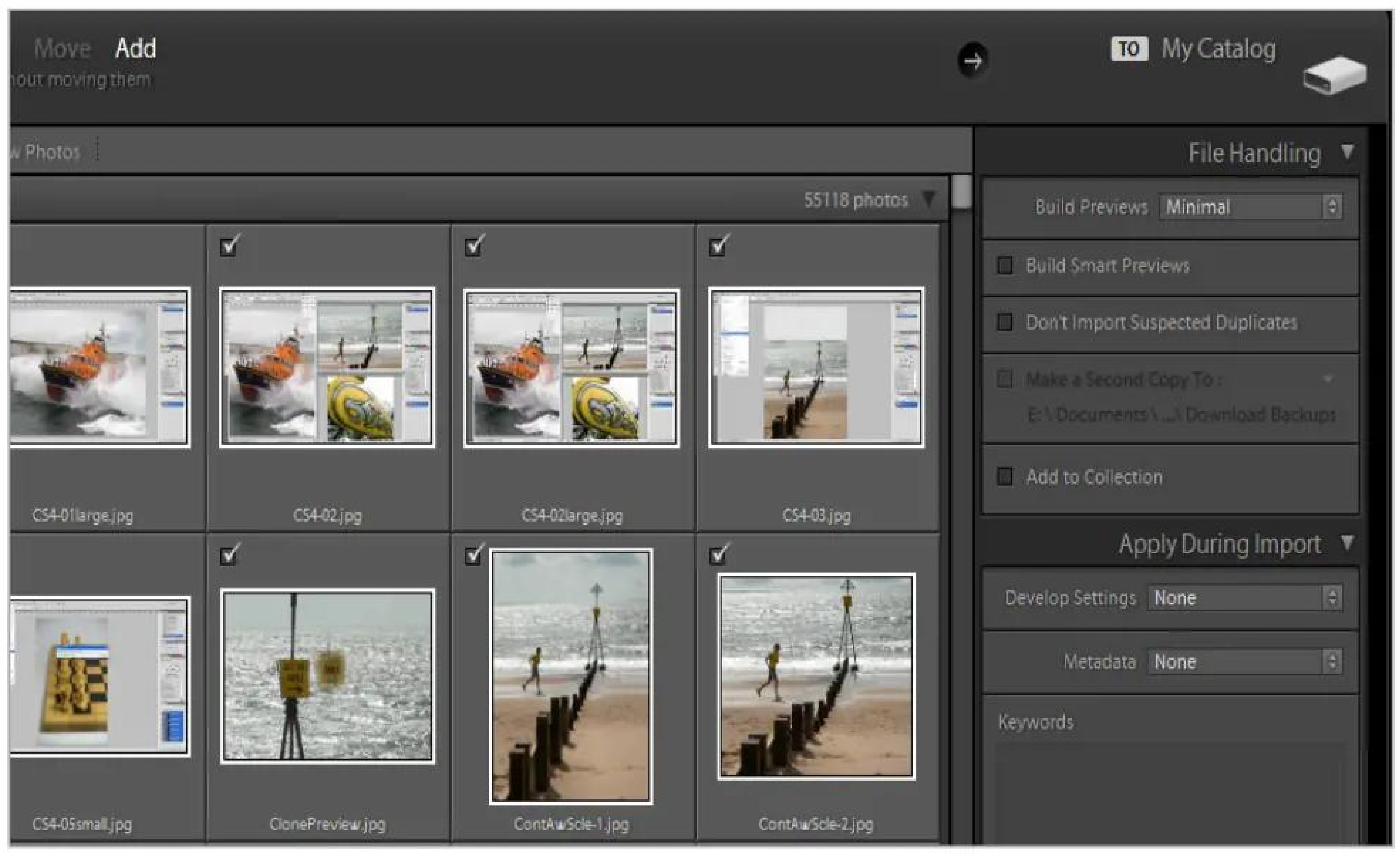
2 When you open Lightroom for the first time, you'll see a blank screen with the words 'No photo source selected' in the middle. To get started with importing your photos, take a look in the bottom left corner. You should see a button labelled Import. Click on this and you'll be taken to a new screen to begin the import process.



3 On the next screen, you'll see a message saying 'Please select a source'. In the upper left you'll see a list of the storage devices attached to your system. If you want to import photos from some other source, such as a USB flash drive, you need to plug it in now. Lightroom will add it to the drive list as soon as it's detected.



4 Click on the drive that contains the folder from which you wish to import your images and you should see all the folders on that drive displayed in the file-tree on the left of the screen. Navigate to the correct folder and click on it. Lightroom will immediately begin searching that folder for image files, including any sub-folders.

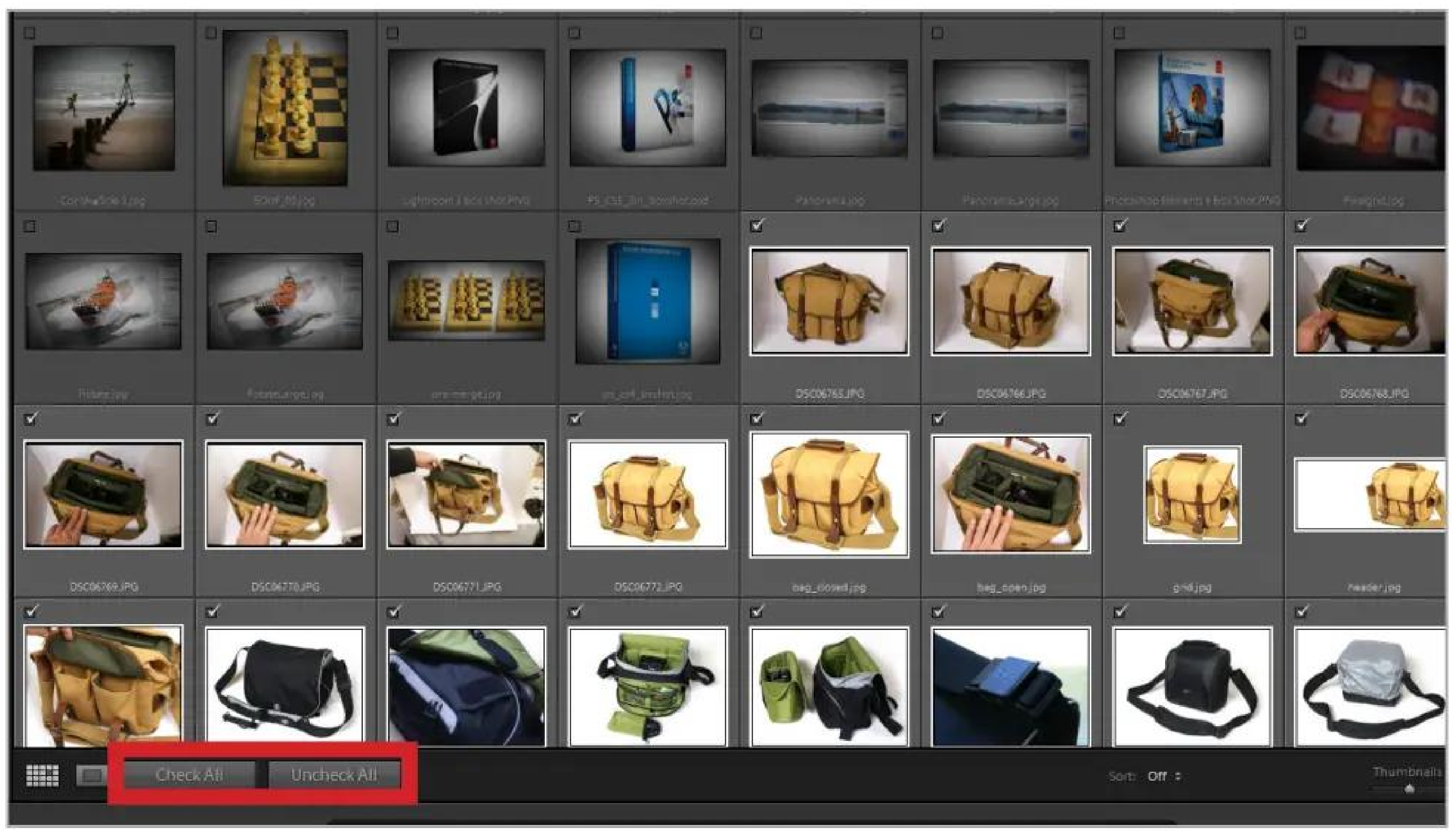

Move Add
My Catalog
55118 photos
File Handling
Build Smart Previews
Don't Import Suspected Duplicates
Make a Second Copy To :
Add to Collection
Apply During Import
Keywords
CS4-01large.jpg
CS4-02.jpg
CS4-02large.jpg
CS4-03.jpg
CS4-05small.jpg
ClonePreview.jpg
ContAwScle-1.jpg
ContAwScle-2.jpg

Build Previews: Minimal

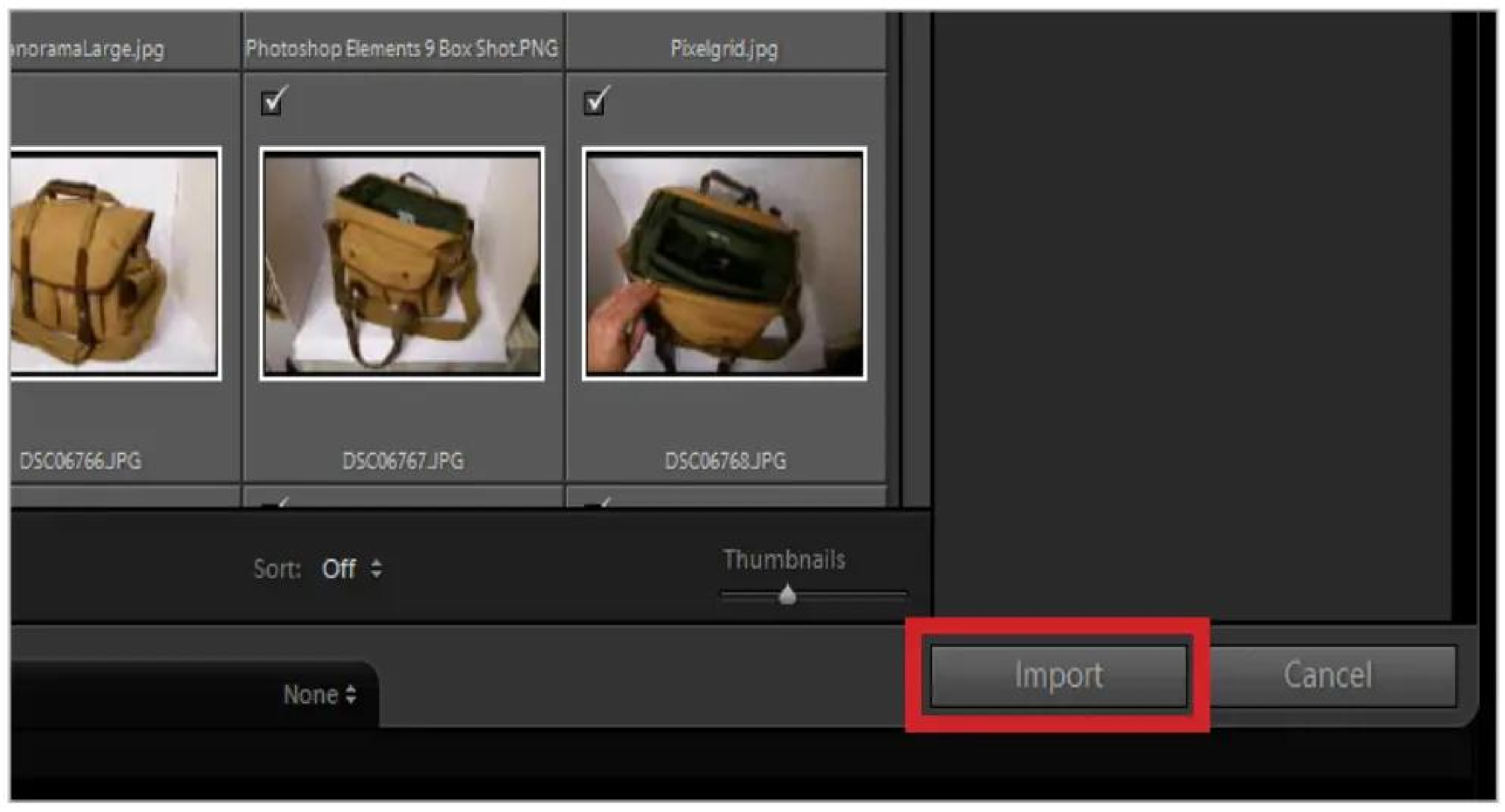
Develop Settings: None

Metadata: None

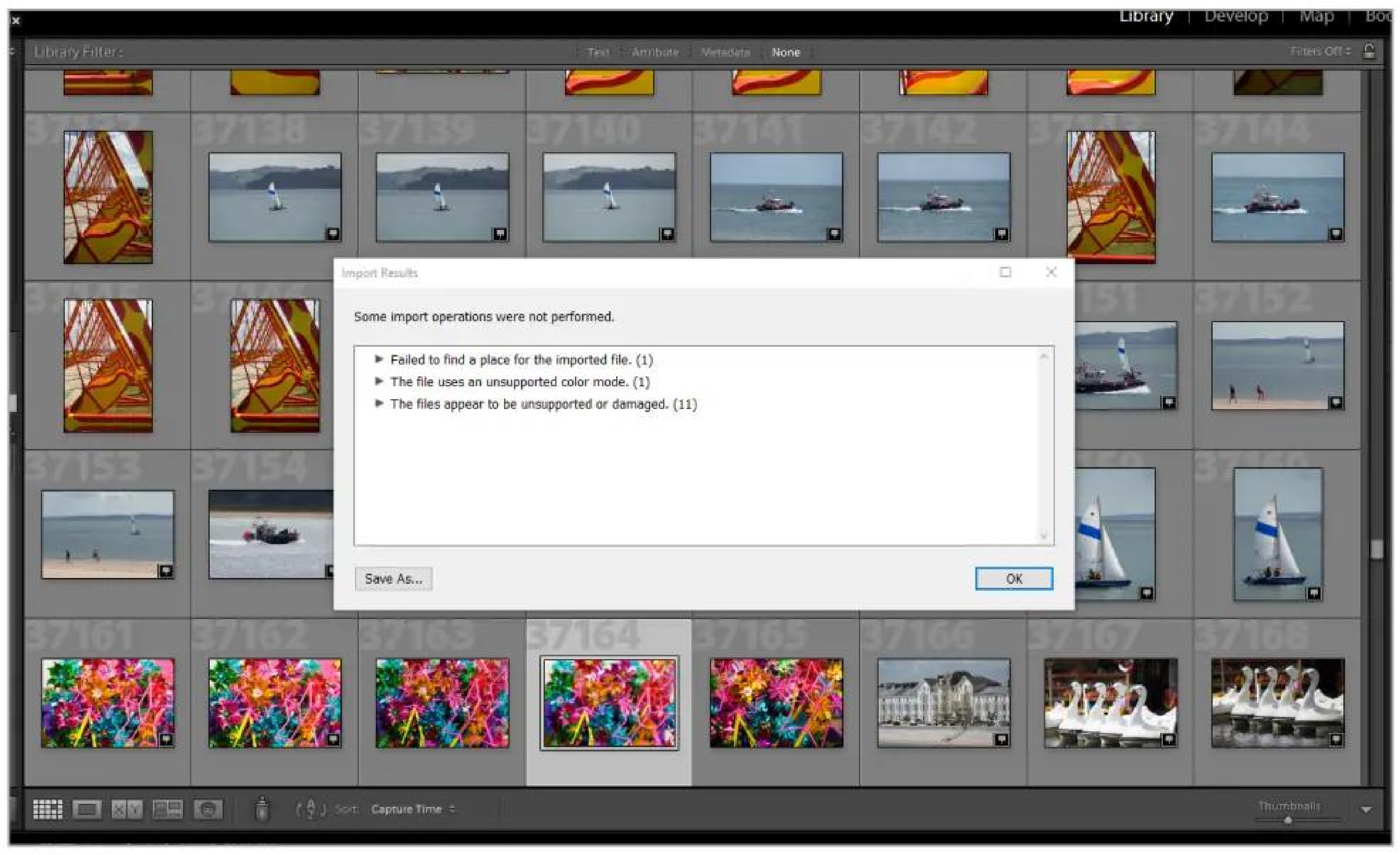
5 The process of finding image files is fairly quick and even a large collection should only take a couple of minutes. Meanwhile there are a couple of settings we can look at. On the right of the screen you'll see a panel called File Handling. Open it and if you want, un-check the option 'Don't import suspected duplicates'.


Check All
Uncheck All
Sort: Off
Thumbnails

6 Once the import system has located all the photos in your selected folder you'll see the total that it's found and the combined file size displayed in both the lower left and upper right corners of the screen. All the files will be checked by default but if there are any that you don't want to import, you can uncheck them.


noramaLarge.jpg
Photoshop Elements 9 Box Shot.PNG
Pixelgrid.jpg
DSC06766.JPG
DSC06767.JPG
DSC06768.JPG
Sort: Off
Thumbnails
None
Import
Cancel

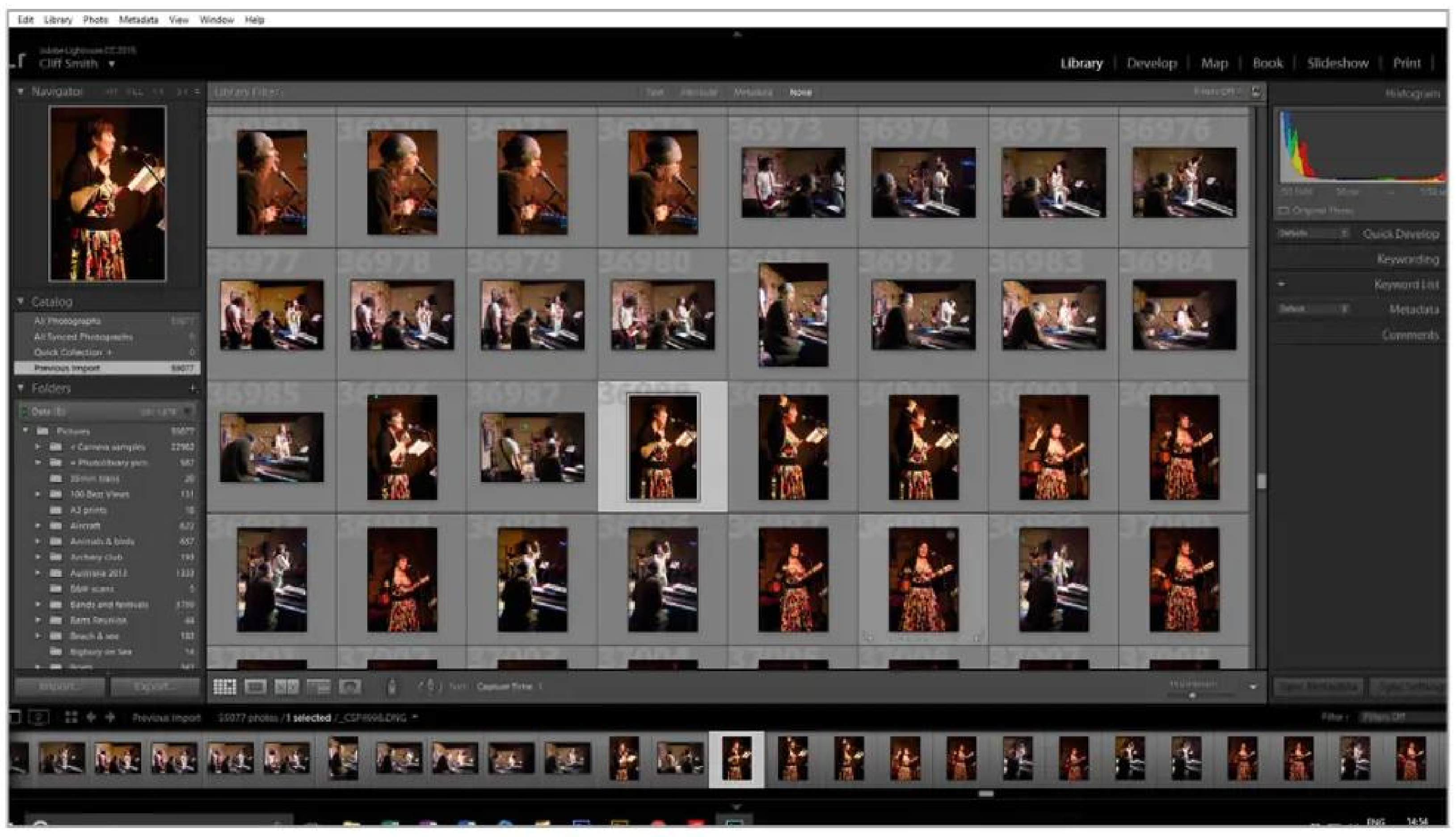
7 Once you're happy with your selection of photos to be imported, click on the Import button in the bottom right corner of the screen and Lightroom will begin adding photos to your catalogue. If you're importing a large collection of images for the first time this process can take an hour or more, so go and do something else for a while.


Library | Develop | Map | Boo
Text Attribute Metadata None
Import Results
Save As...
OK
Sort: Capture Time

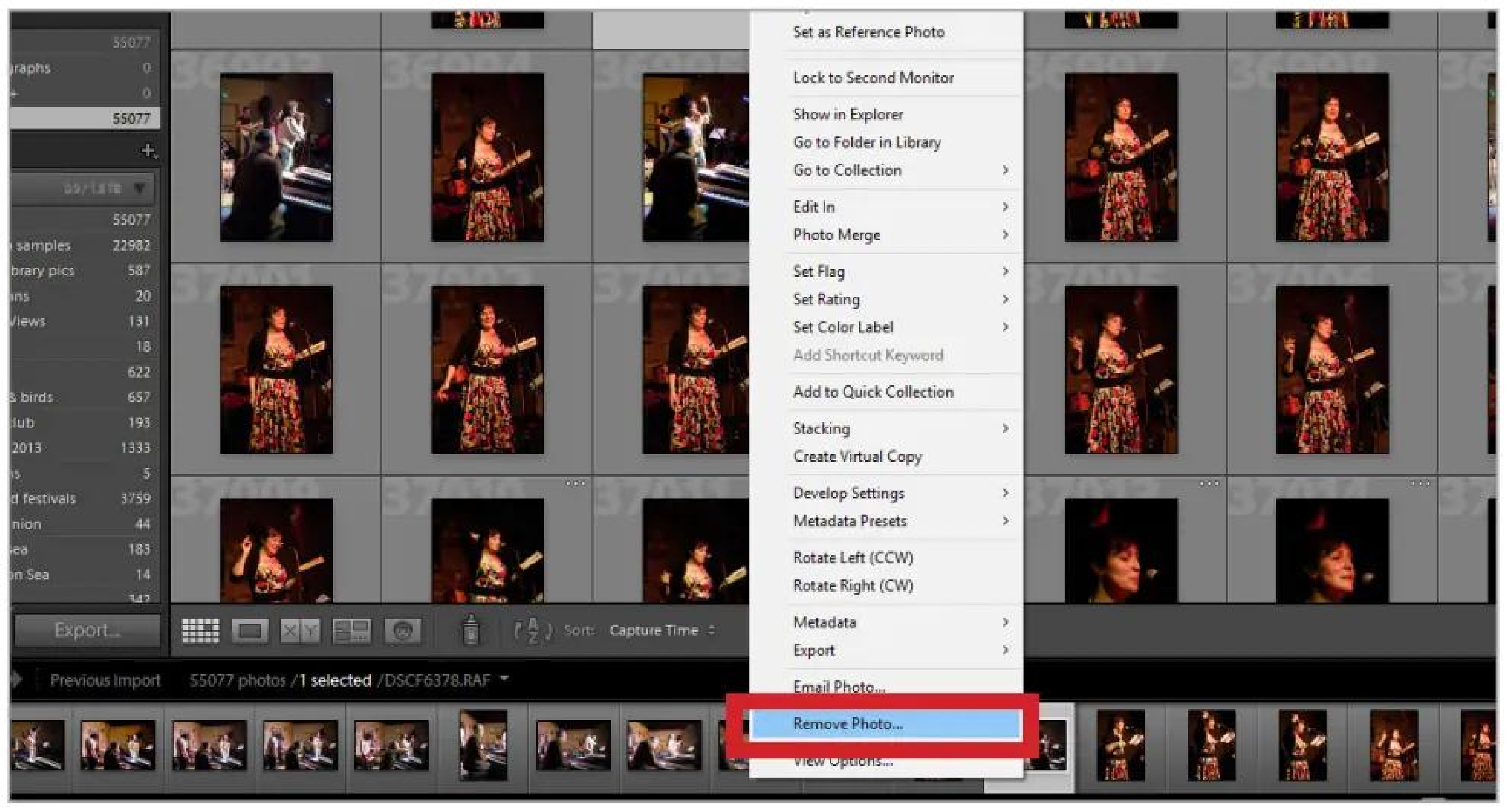
Some import operations were not performed.

- Failed to find a place for the imported file. (1)
- The file uses an unsupported color mode. (1)
- The files appear to be unsupported or damaged. (11)

8 Once the import process has completed you'll see a report notifying you of any problems. Common errors include damaged files, which will not be imported, and unsupported file type or colour modes. Lightroom supports all common file types and most colour modes, so it's unlikely that you'll see either of these if you're just importing digital photos.


Library | Develop | Map | Book | Slideshow | Print
Navigator
Catalog
Folders
Previous Import
Sort: Capture Time

9 Click on the OK button to dismiss the report message and you'll finally be able to interact with your new catalogue of images. We'll take a closer look at the layout of the workspace in the next tutorial but for now just explore and check that all your pictures are present and correct. You can scroll up and down by using the mouse wheel.


Set as Reference Photo
Lock to Second Monitor
Show in Explorer
Go to Folder in Library
Go to Collection
Edit In
Photo Merge
Set Flag
Set Rating
Set Color Label
Add Shortcut Keyword
Add to Quick Collection
Stacking
Create Virtual Copy
Develop Settings
Metadata Presets
Rotate Left (CCW)
Rotate Right (CW)
Metadata
Export
Email Photo...
Remove Photo...
View Options...
Export...
Sort: Capture Time
Previous Import
55077 photos /1 selected /DSCF6378.RAF

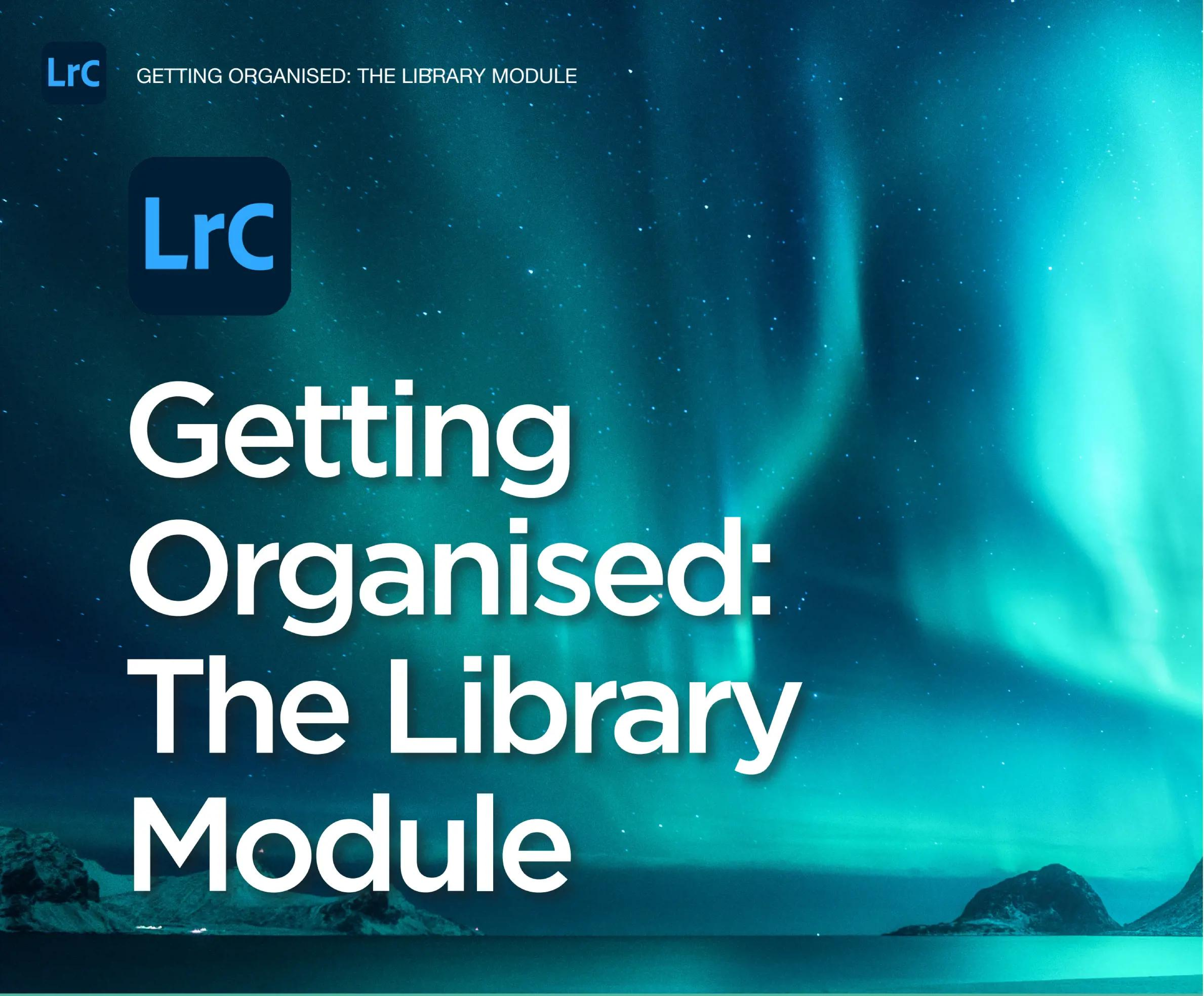
10 If you subsequently want to remove any imported images from your catalogue you may do so by right-clicking on the image and selecting Remove Photo from the context menu. Note that this doesn't delete the photo from your hard drive, it just stops Lightroom from seeing it. You can reimport it later if you change your mind.

Dramatic Effects

With Lightroom you're able to tweak and alter any photo and produce an end result that's drastically and dramatically different to its original. There's a lot that can be applied to an image in Lightroom. Of course, you need to know where to go to apply these effects; thankfully, we cover this too.

The Tone Curve panel is one of the most powerful tools in Lightroom's arsenal. It allows you to selectively alter that relative brightness of different tonal ranges within an image, but does so smoothly, blending from one tone into another on a curve. When combined with the Masking Tool's Select Subject option, it can create some terrific effects, as seen on this dramatic portrait shot.

AFTER
BEFORE



Getting Organised: The Library Module

The Library module is where you organise your images and select candidates for editing. You can apply and search for keywords, meta tags, EXIF data, GPS location data and even individual faces. It's a very powerful resource at the heart of the Lightroom system. In this section, we'll explore the Library module and find out what it can do.

Contents

- Introducing the library module
- Using the loupe View
- Managing your photos
- Understanding metadata
- Sorting and rating your photos
- Organising photos with collections
- Searching for your images
- Using face recognition
- Fix photos with quick develop
- Before and after: monochrome shots

Introducing the Library Module

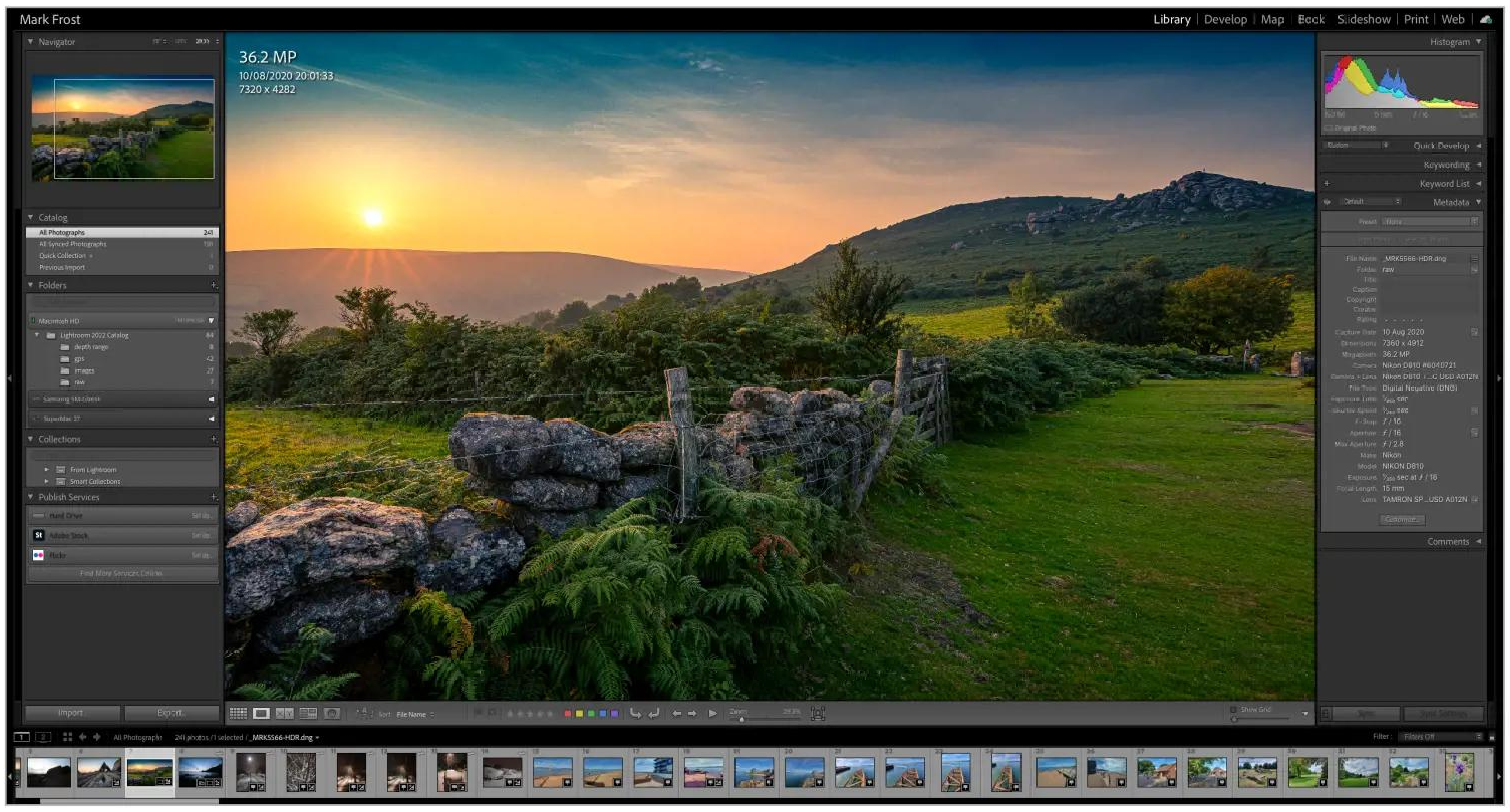
The Library module is the central hub of Adobe Lightroom. From here you can select, sort, rate and search your image library; add keywords, compare images and much more. Here's a quick overview of what it offers.

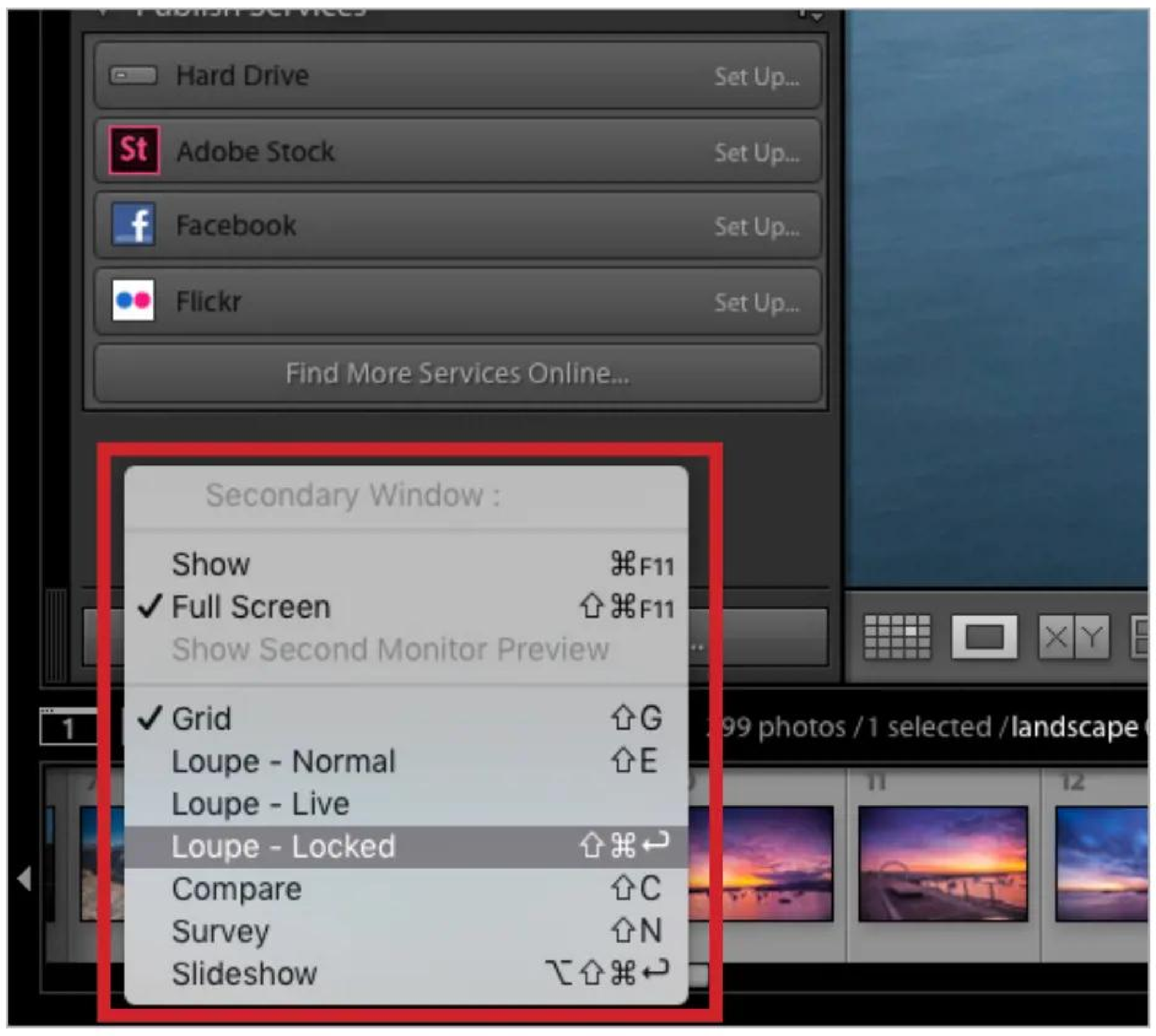
In the last section, you imported your images into Lightroom and the Library module is where you'll see the result of that process. The Library module is where you can view and scroll through your image catalogue, select images for sharing or development, add and search for keywords and build collections. It's comparable to Adobe Bridge, the file browsing and viewing app that installs alongside Photoshop, but the Library module has a lot more functionality.

Loupe View

After the Grid view, the other one that you'll find yourself using most often is the Loupe view. A Loupe is a small handheld magnifier used by photographers to closely examine a negative or print, to check sharpness and spot minor flaws. Lightroom's Loupe view performs a similar function. It magnifies the selected image and if you click on the image in the view window it will zoom in to full 1:1 magnification, allowing you to easily spot any imperfections. You can click-and-drag on the image to move it around and the thumbnail at the top of the left sidebar shows you the part of the image you are looking at.

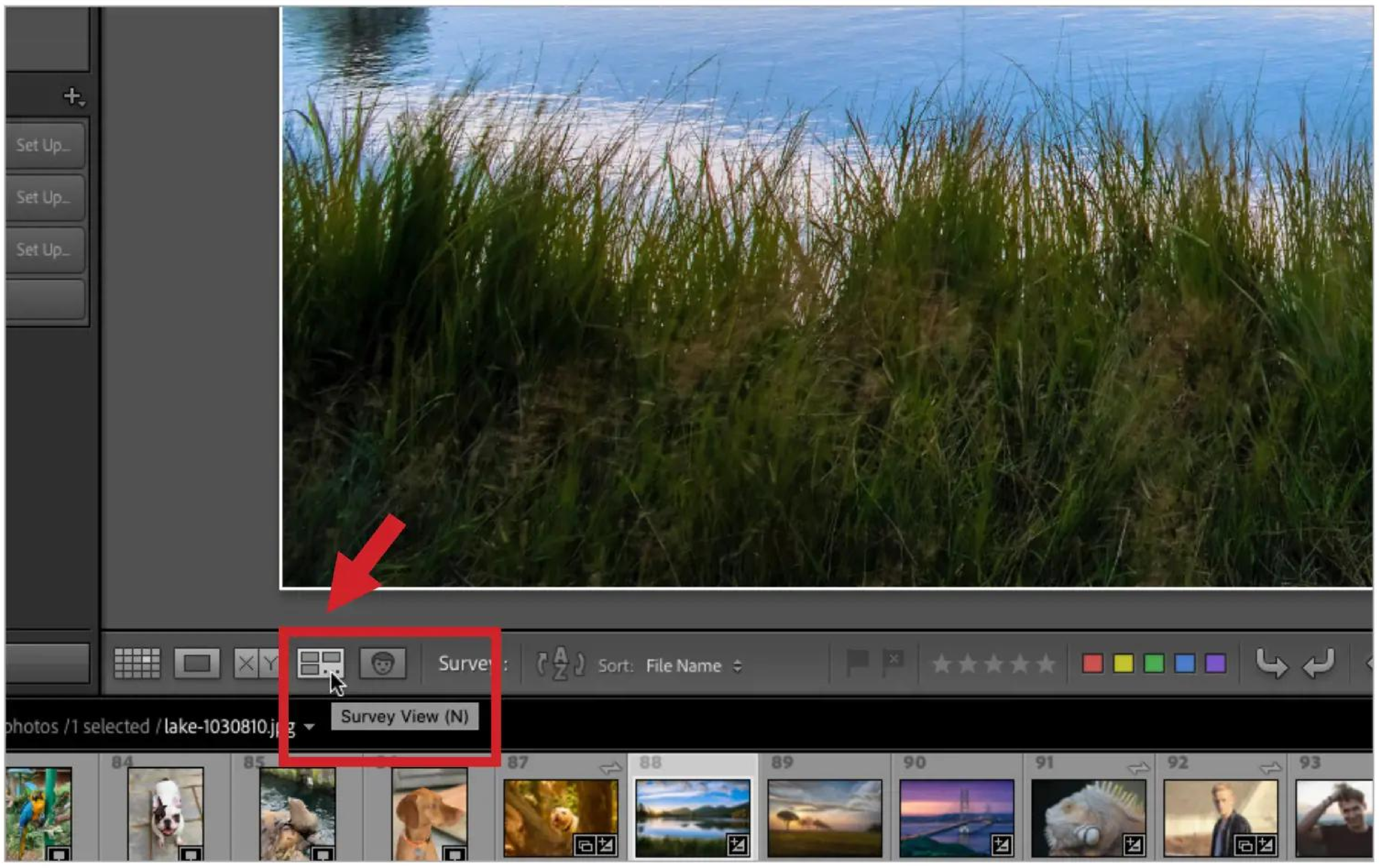
If you're using a second monitor, it can display a Loupe view of any image that you select in the Grid view. There are several other options for the secondary view available from a context menu that appears when you right-click or click-and-hold on the second monitor button.


Mark Frost
Library | Develop | Map | Book | Slideshow | Print | Web
36.2 MP
10/08/2020 20:01:33
7320 x 4282


Hard Drive
Set Up...
Adobe Stock
Set Up...
Facebook
Set Up...
Flickr
Set Up...
Find More Services Online...
Secondary Window :
Show ⌘F11
✓ Full Screen ⇧⌘F11
Show Second Monitor Preview
✓ Grid ⇧G
Loupe - Normal ⇧E
Loupe - Live
Loupe - Locked ⇧⌘↩
Compare ⇧C
Survey ⇧N
Slideshow ⌥⇧⌘↩
99 photos / 1 selected / landscape

Compare View

To compare a chosen image with another side-by-side, select one image and then another and then click on the button for Compare view or use the hotkey C. Both images will be displayed at the same size and zoom level, with the first you selected being labelled Select and the other as Candidate. If you use the zoom slider at the bottom of the screen, both images will be zoomed at the same time and if you drag one image around the other will move as well, which is handy for pixel-peeping the same spot on two similar images to see up close which one is in sharper focus. One handy hint is to click on the arrows on either side of the screen to minimise the sidebars and maximise the viewing area.


Set Up...
Set Up...
Set Up...
Survey
Sort: File Name
photos /1 selected /lake-1030810.jpg
Survey View (N)
84
85
87
88
89
90
91
92
93

Survey View

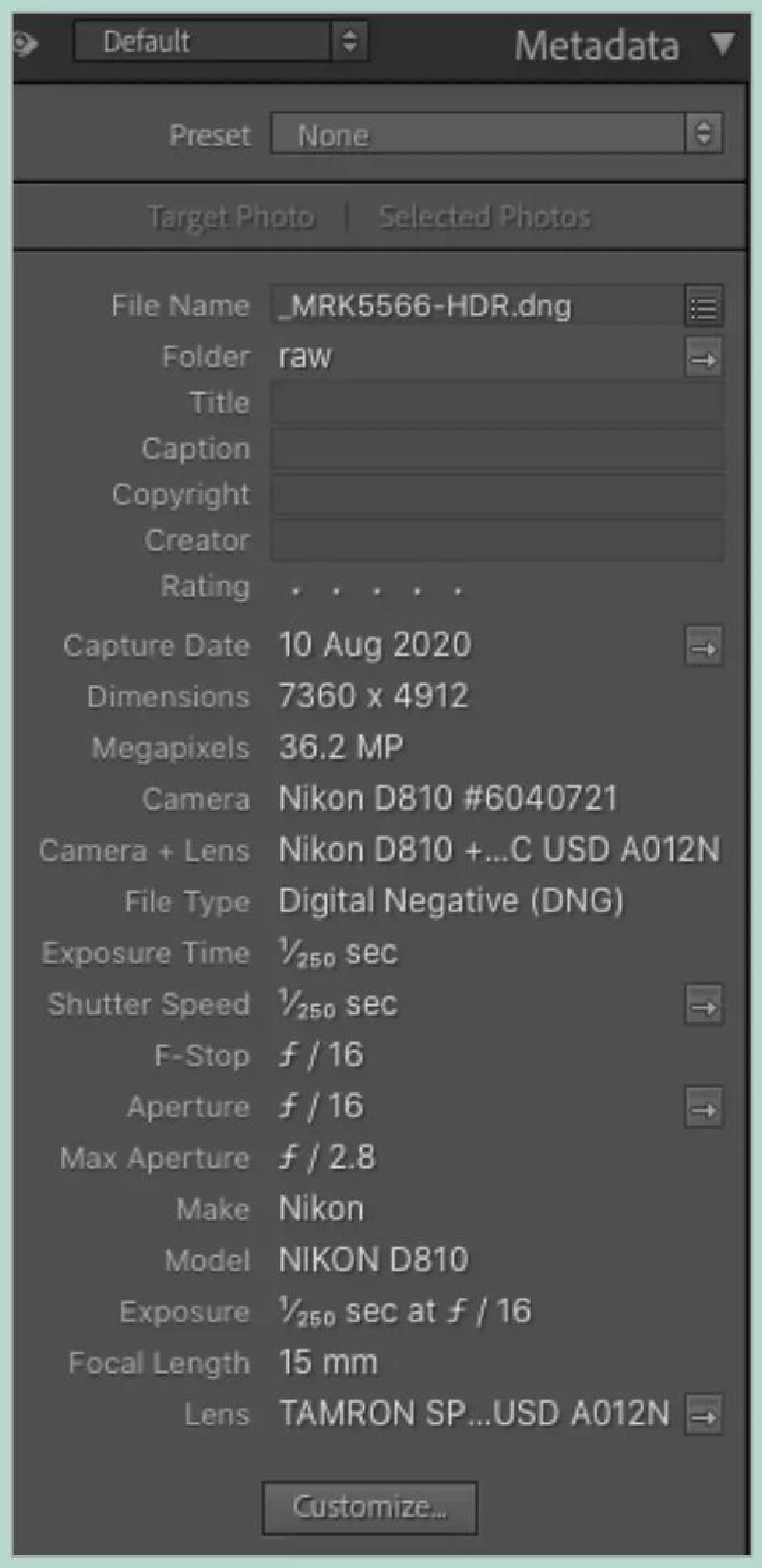
The Library module offers several ways to view your images. One useful way to compare a group of similar images is the Survey view. To use this, use CTRL-click or SHIFT-click to select three or more images and then click on the Survey view button, highlighted in the image above, or use the hotkey N. The view window will change to show the selected images arranged automatically to maximise the size of each image. The Survey view can display dozens of images but obviously the more you select the smaller the individual images appear, so it's best to select no more than five or six at a time.

Manage Your Photos

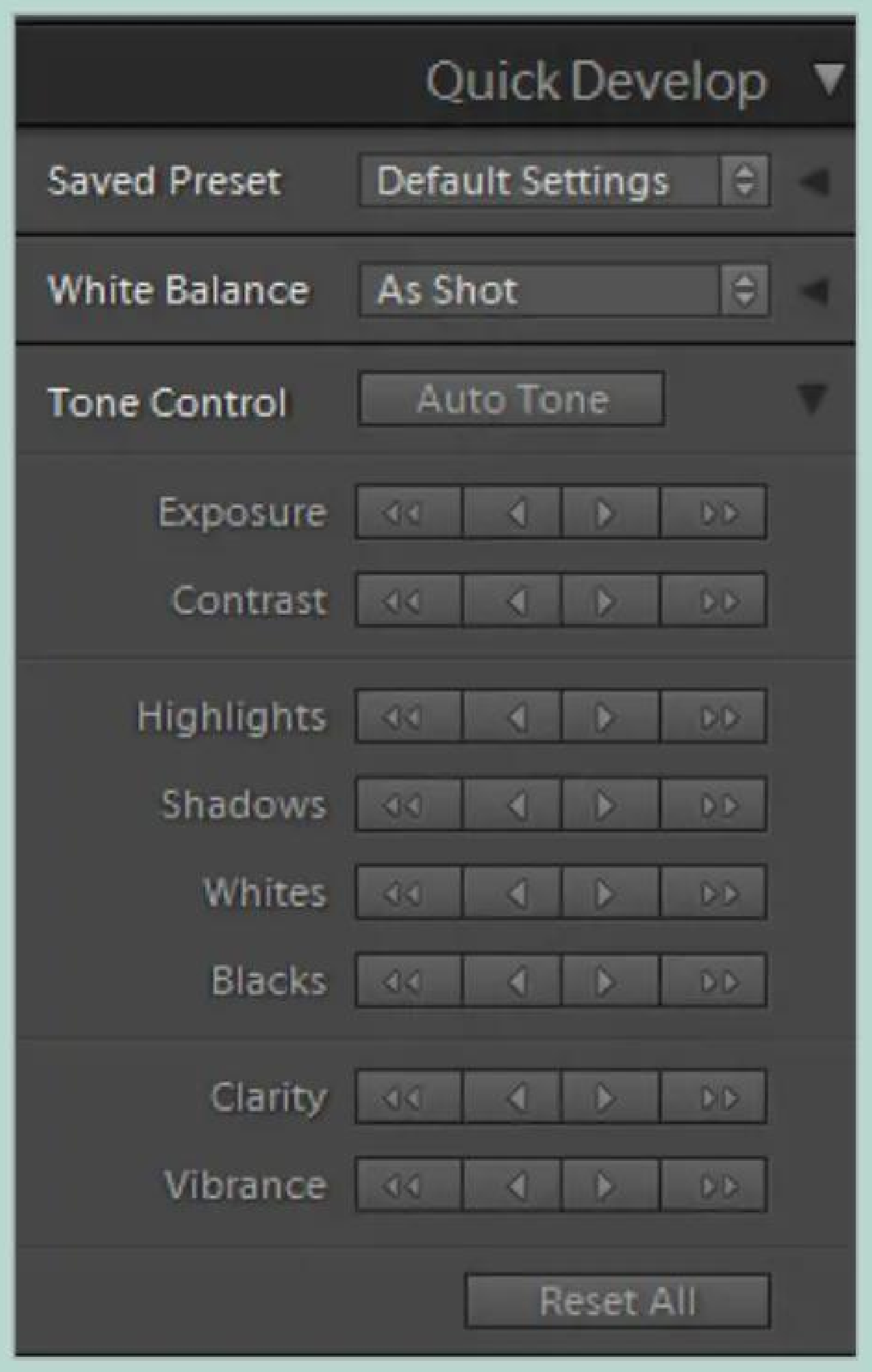
The Library Module is the workspace where you can manage and organise all your Lightroom photos and their metadata. You can find, assess and import them, assign keywords and search for specific images; and it is also the space where you can use Lightroom's social integration tools such as Facebook, Flickr and find more services online.

Metadata

In the left sidebar you'll also find the metadata panel. In the case of photographs, metadata is generated by the camera that took the picture. This data file is then attached to the digital image, carrying information about the image, such as the date and time it was shot, the type of camera and lens used, the exposure settings used, GPS location data, copyright information, the creator's name, contact details and even information about the size of the photo and the flash settings if they were used in the shot. There are many editable fields in the image metadata and you can edit them by clicking on them in the sidebar panel and typing in your entry. If you upload images to photo sharing sites like Flickr, this data will be shown as part of the image profile.


Default
Metadata
Target Photo
Selected Photos
Customize...

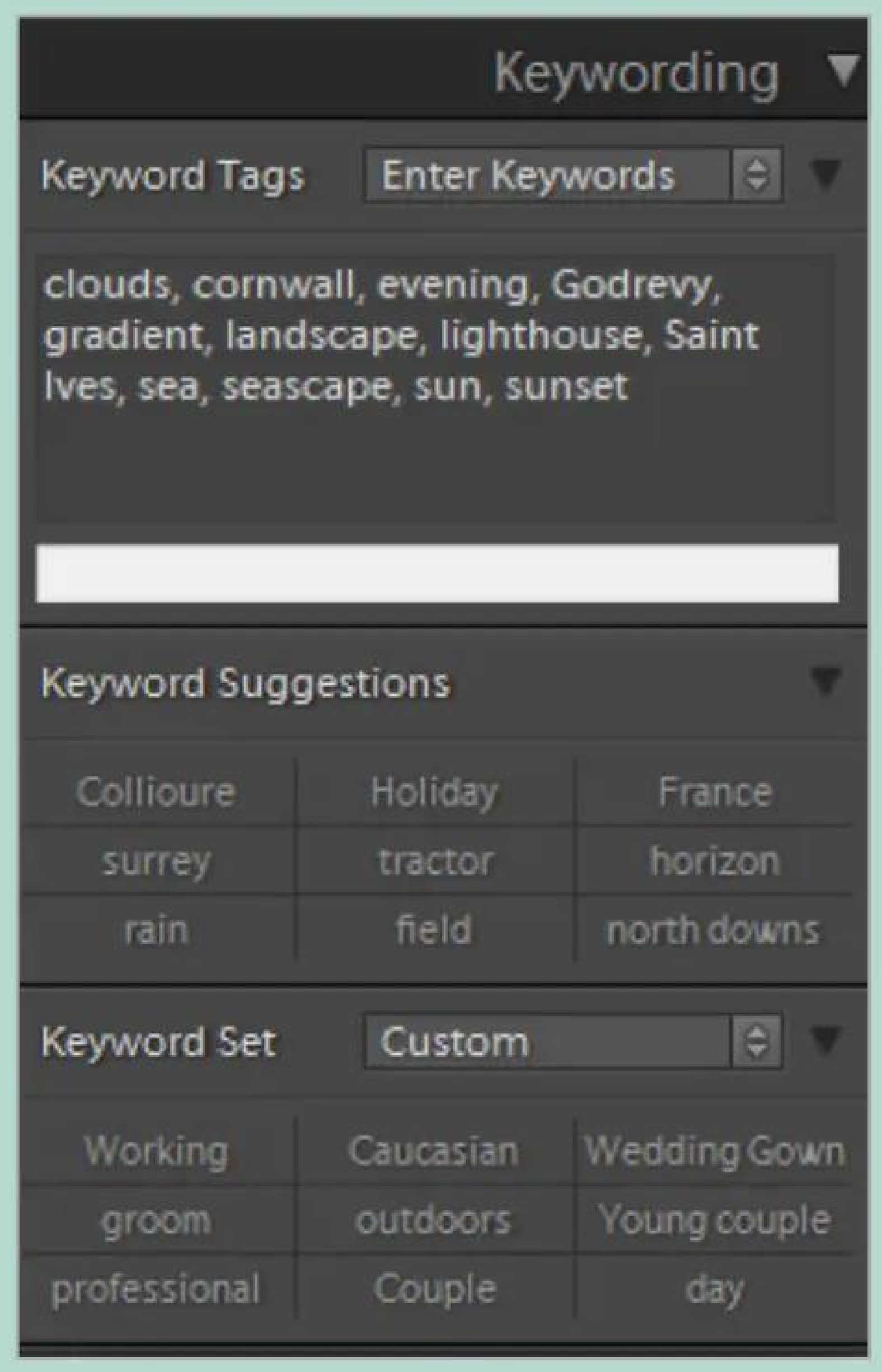
Preset: None
File Name: _MRK5566-HDR.dng
Folder: raw
Title
Caption
Copyright
Creator
Rating: · · · · ·
Capture Date: 10 Aug 2020
Dimensions: 7360 x 4912
Megapixels: 36.2 MP
Camera: Nikon D810 #6040721
Camera + Lens: Nikon D810 +...C USD A012N
File Type: Digital Negative (DNG)
Exposure Time: $1/250$ sec
Shutter Speed: $1/250$ sec
F-Stop: ƒ / 16
Aperture: ƒ / 16
Max Aperture: ƒ / 2.8
Make: Nikon
Model: NIKON D810
Exposure: $1/250$ sec at ƒ / 16
Focal Length: 15 mm
Lens: TAMRON SP...USD A012N


Quick Develop
Tone Control
Auto Tone
Exposure
Contrast
Highlights
Shadows
Whites
Blacks
Clarity
Vibrance
Reset All

Saved Preset: Default Settings
White Balance: As Shot

Quick Develop

There are several useful features to be found in the left-hand sidebar of the Library view. One is Quick Develop that lets you make broad adjustments to exposure, contrast and tone; and apply pre-sets or automatic adjustments to single images or groups of selected images. It's very useful if, for example, you had the wrong white balance or exposure set on your camera for a group of shots; but it doesn't allow for the same range or finesse of adjustment as the Develop module that we'll look at in a later section.


Keywording
Keyword Suggestions
Collioure
Holiday
France
surrey
tractor
horizon
rain
field
north downs
Working
Caucasian
Wedding Gown
groom
outdoors
Young couple
professional
Couple
day

Keyword Tags: Enter Keywords

clouds, cornwall, evening, Godrevy, gradient, landscape, lighthouse, Saint Ives, sea, seascape, sun, sunset

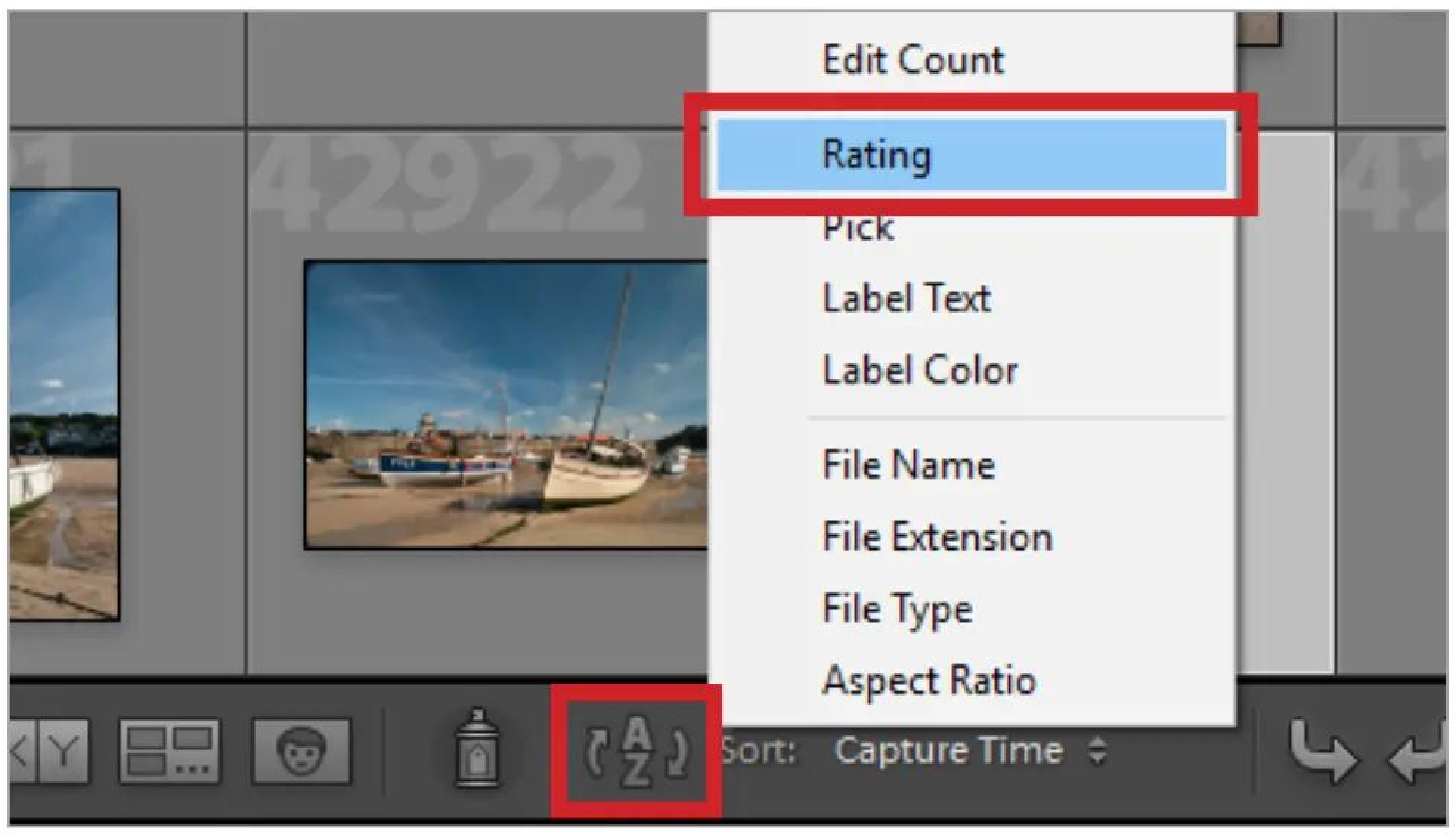
Keyword Set: Custom

Keywording

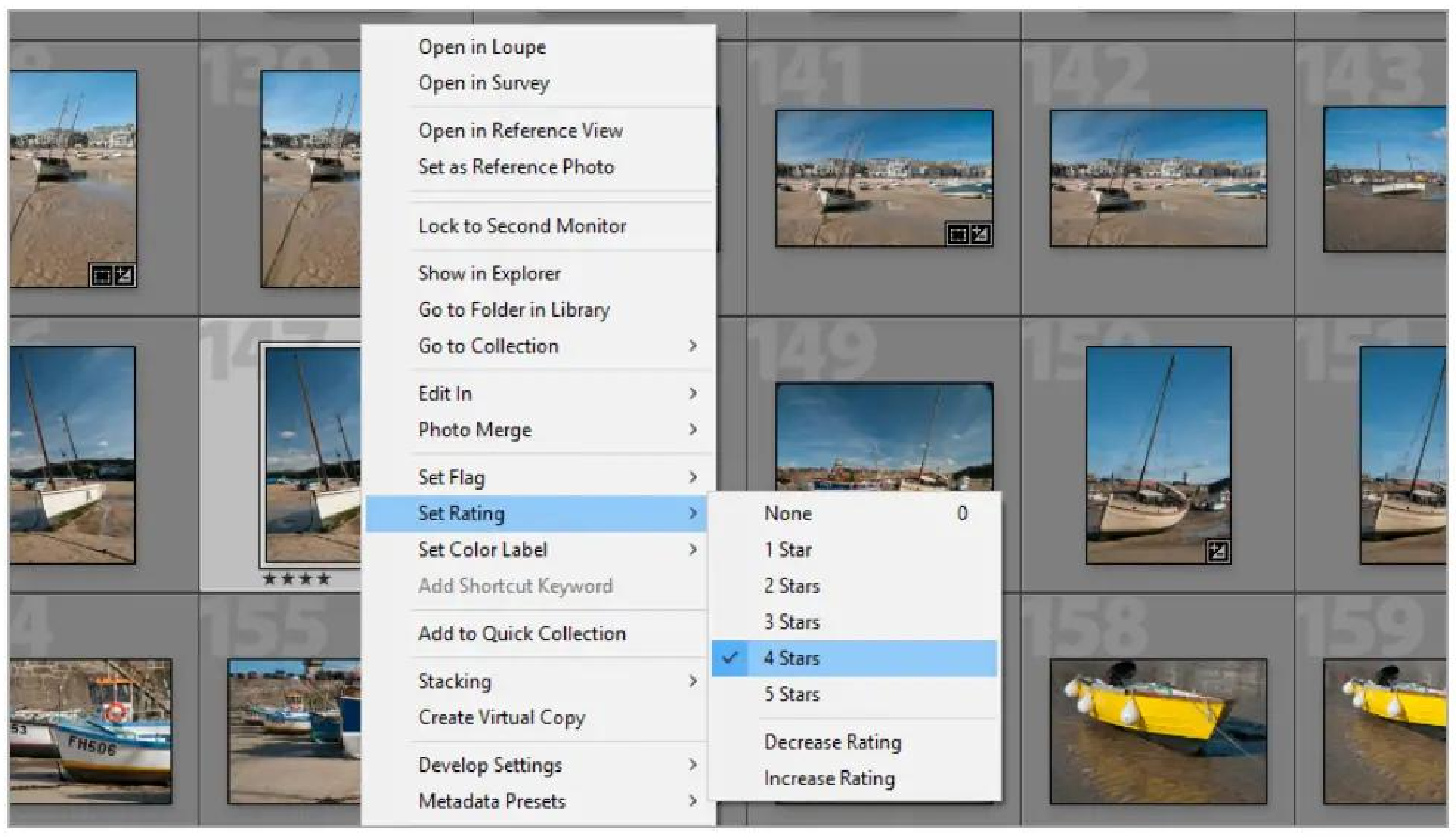
The other really useful feature found in the left sidebar is Keywording. You can add keywords to single images or groups of images, to make it easier to sort and search your image library. You can add keywords manually or from an exhaustive list, or use automatic suggestions. Keywords are added into the metadata for the image. The more keywords you use, the easier it becomes to search your image library for more specific items and narrow down search parameters to pick out the most appropriate photos that you are after.

Sorting and Rating Your Photos

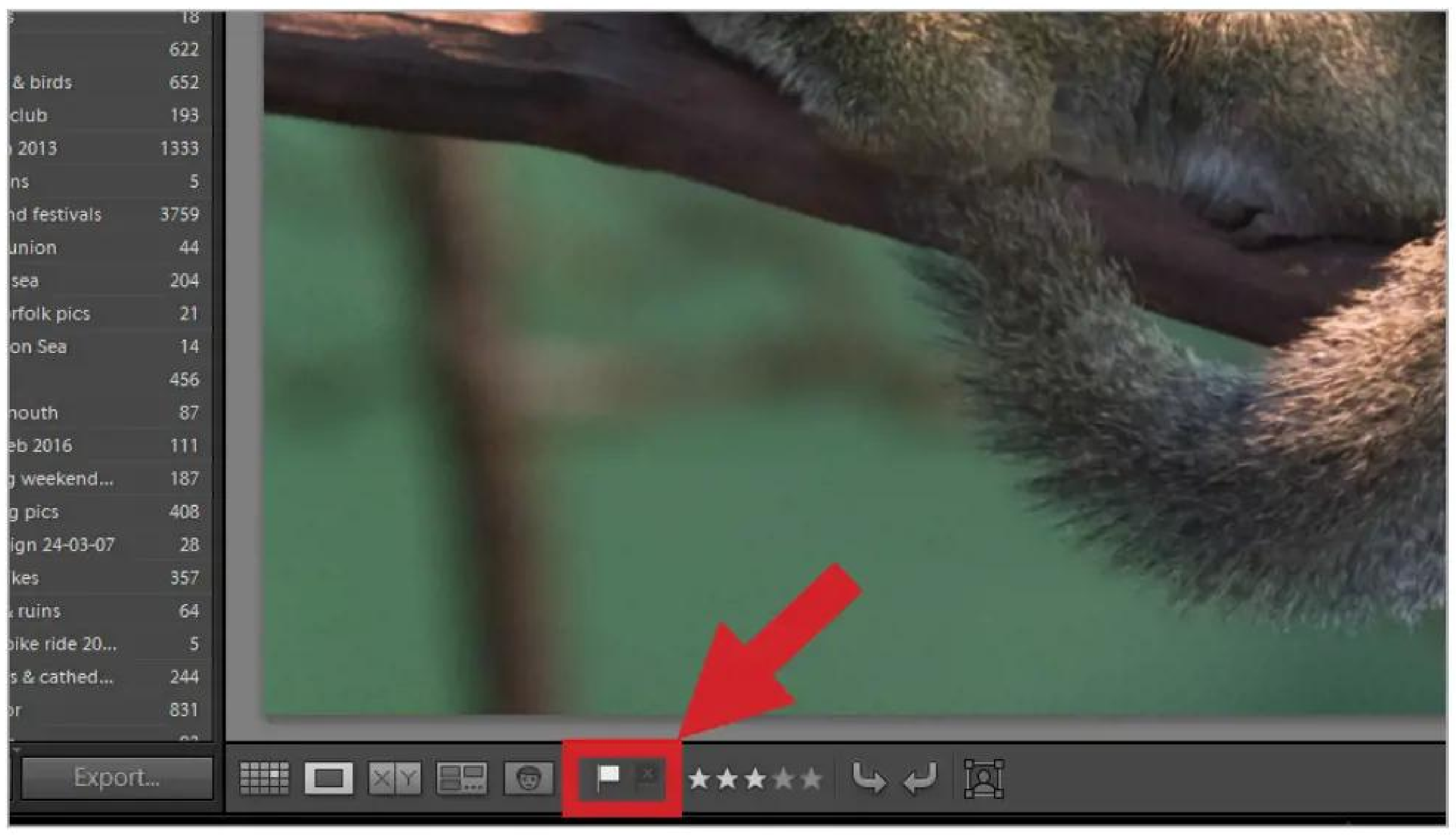
Keeping your photo library organised is essential and the Library module has several tools and features that you can use to achieve this goal; allowing you to group them by subject, time, location and who appears in them.


Edit Count
Rating
Pick
Label Text
Label Color
File Name
File Extension
File Type
Aspect Ratio
Sort: Capture Time

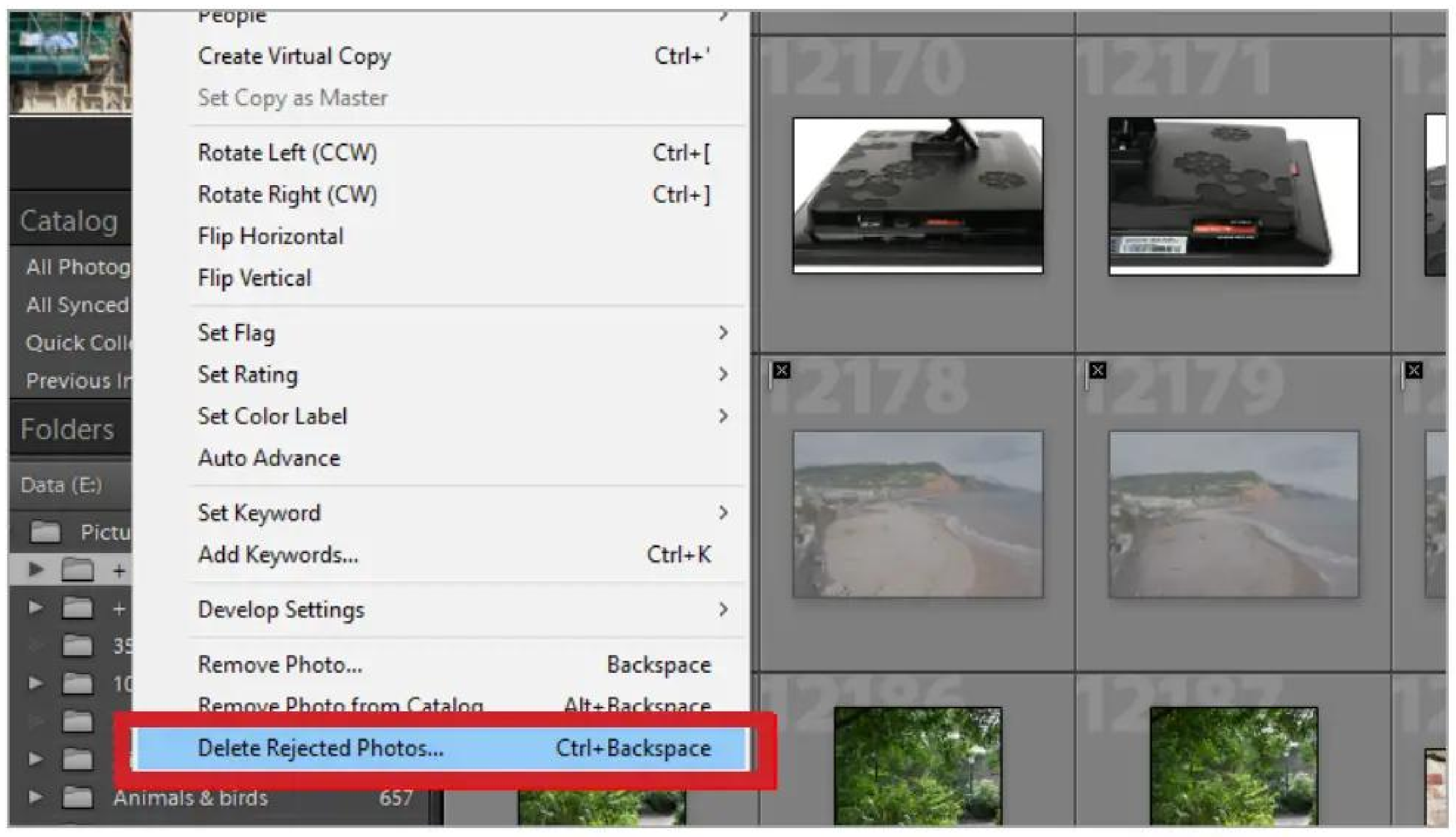
1 Select Grid view by pressing G. By default, photos are listed in the order of shooting date, with the newest at the bottom. You can change the sorting criteria to Rating with the Sort: pop-up menu on the toolbar at the bottom of the view window. You can reverse the order so the highest rated are at the top by clicking the A-Z button.


Open in Loupe
Open in Survey
Open in Reference View
Set as Reference Photo
Lock to Second Monitor
Show in Explorer
Go to Folder in Library
Go to Collection
Edit In
Photo Merge
Set Flag
Set Rating
Set Color Label
Add Shortcut Keyword
Add to Quick Collection
Stacking
Create Virtual Copy
Develop Settings
Metadata Presets
None 0
1 Star
2 Stars
3 Stars
4 Stars
5 Stars
Decrease Rating
Increase Rating

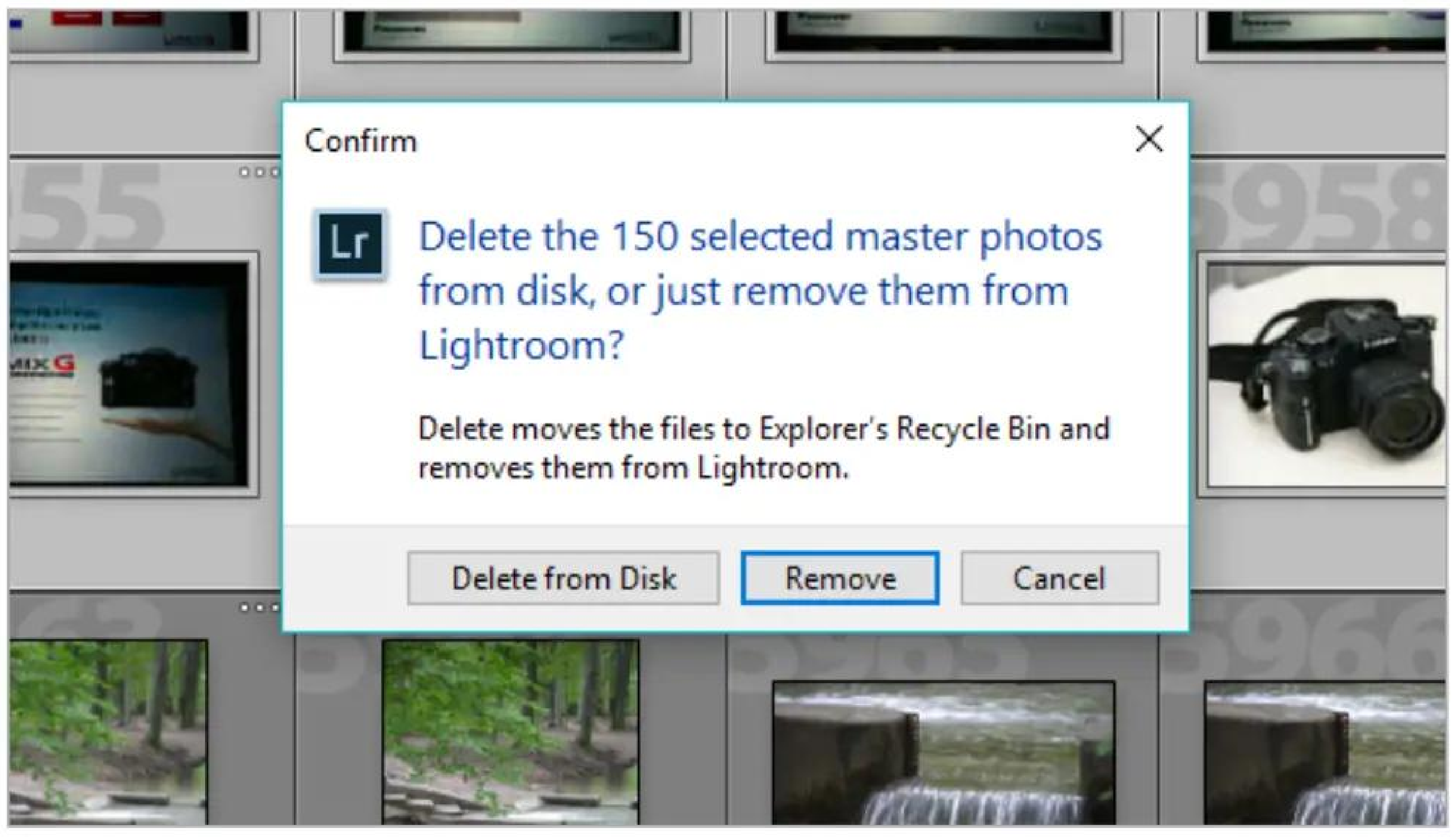
2 The rating of an image is shown by a row of 0-5 stars below the image in all view modes. You can change the rating in several ways: by clicking on the row of stars below the image and dragging to the appropriate position, by tapping the number keys 0-5, or by right-clicking and selecting Set Rating from the menu.



3 As well as setting a star rating, you can also flag a photo as accepted or rejected. Again, there are several ways to accomplish this. You can do it from Grid view by clicking in the upper left corner of the thumbnail or right-clicking to show the Reject flag. You can click on the flag buttons in the toolbar or you can right-click and choose Set Flag from the menu.


Create Virtual Copy Ctrl+'
Set Copy as Master
Rotate Left (CCW) Ctrl+[
Rotate Right (CW) Ctrl+]
Flip Horizontal
Flip Vertical
Set Flag
Set Rating
Set Color Label
Auto Advance
Set Keyword
Add Keywords... Ctrl+K
Develop Settings
Remove Photo... Backspace
Remove Photo from Catalog Alt+Backspace
Delete Rejected Photos... Ctrl+Backspace
Catalog
Folders

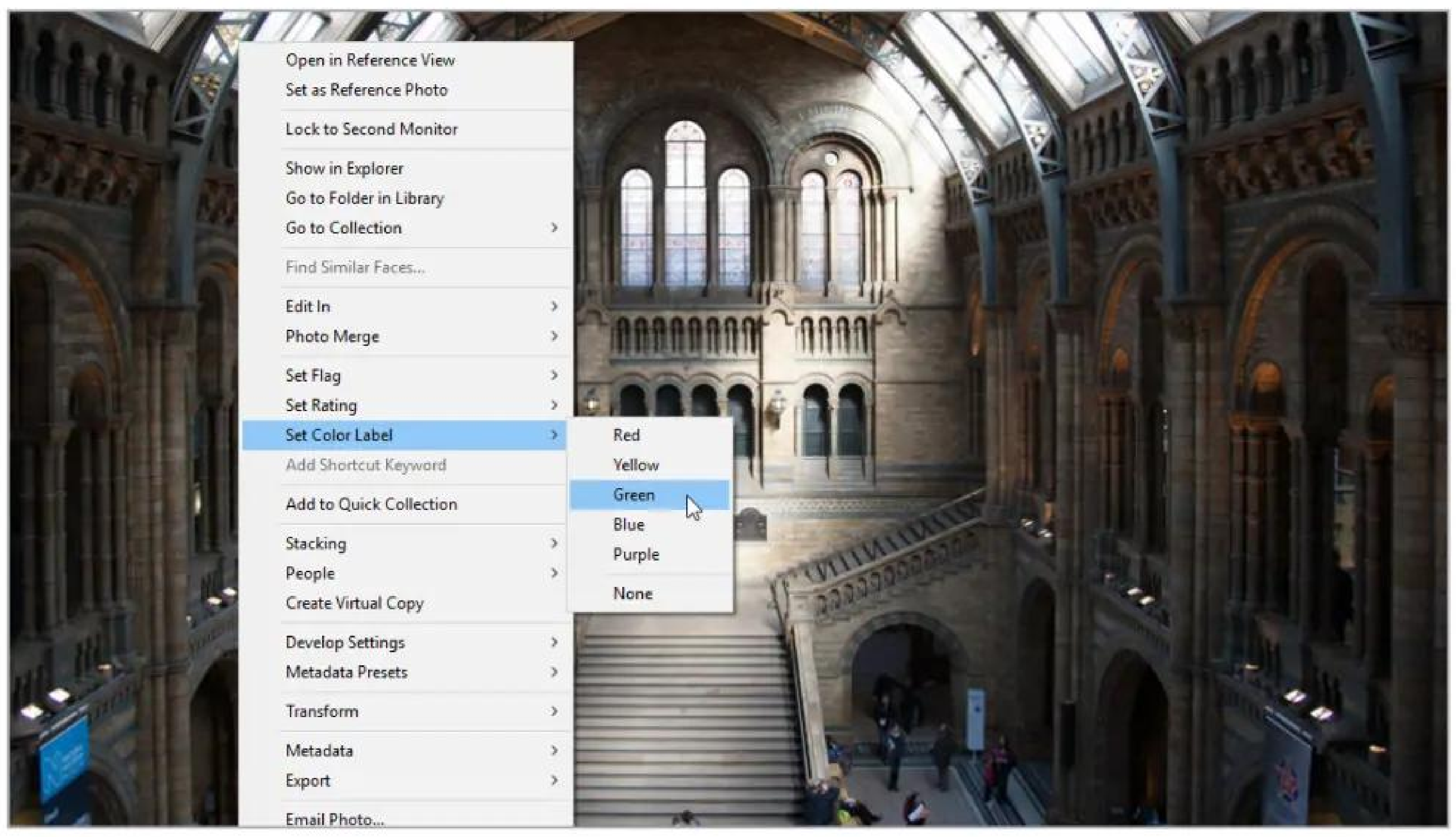
4 Photos flagged as rejected will be greyed out in the Grid view and can be easily deleted. Once you've flagged a few that you don't like, open the Photo menu in the top bar and at the bottom of the list you'll see Delete Rejected Photos. A quicker alternative is to use the keyboard shortcut, Ctrl + Backspace.


Confirm
Delete from Disk
Remove
Cancel

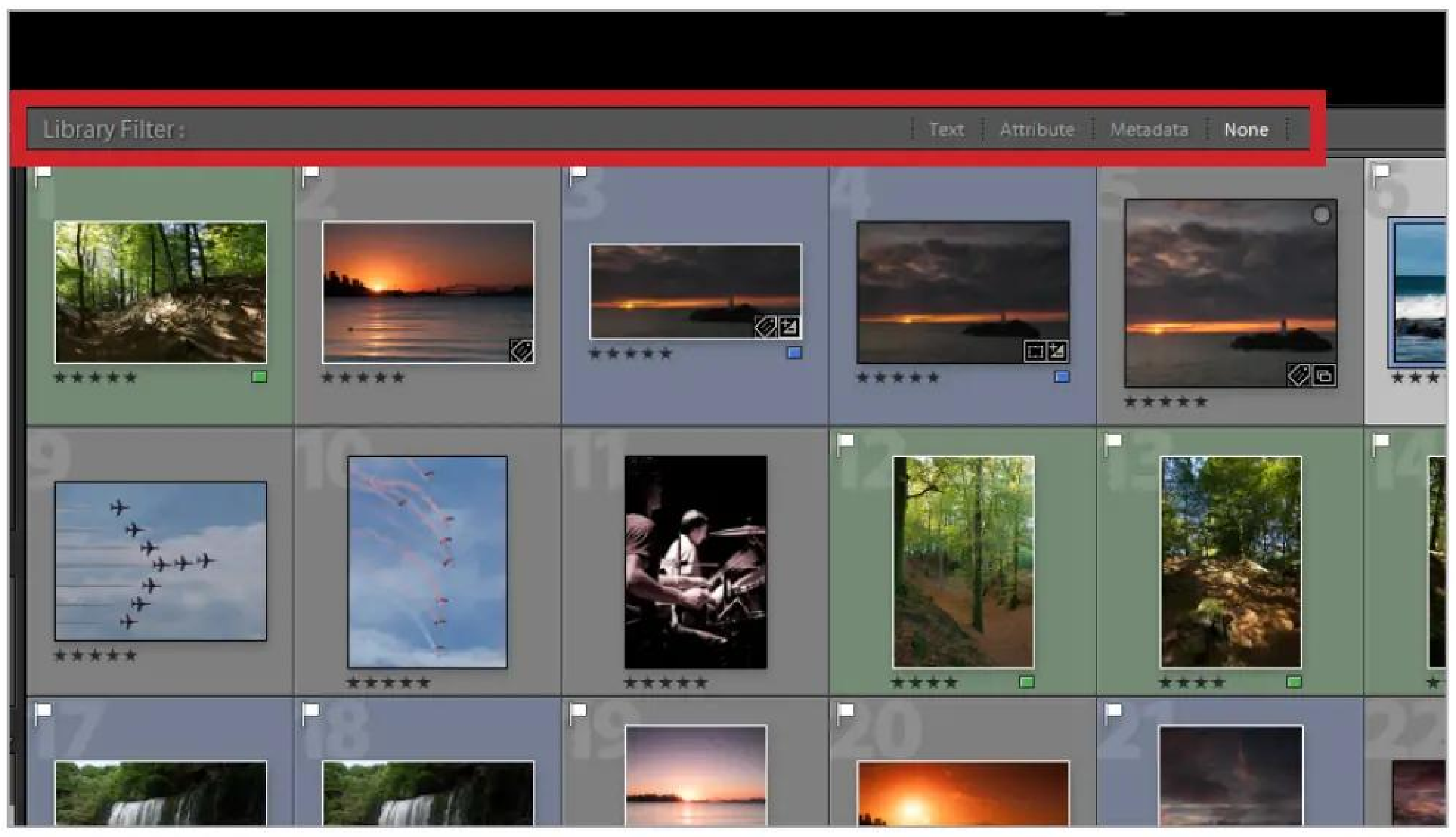
Delete the 150 selected master photos from disk, or just remove them from Lightroom?

Delete moves the files to Explorer's Recycle Bin and removes them from Lightroom.

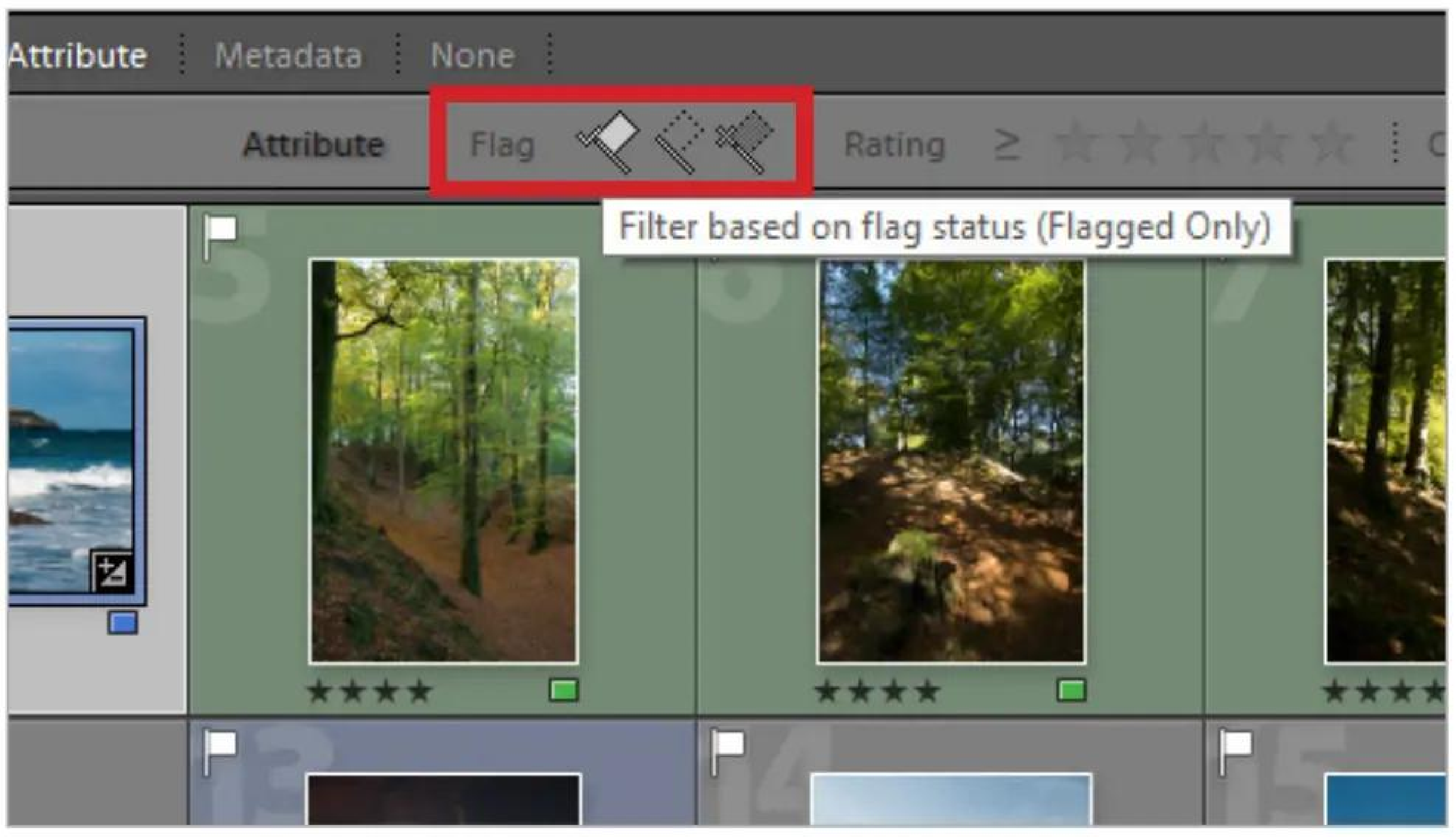
5 The rating of an image is shown by a row of 0-5 stars below the image in all view modes. You can change the rating in several ways: by clicking on the row of stars below the image and dragging to the appropriate position, by tapping the number keys 0-5, or by right-clicking and selecting Set Rating from the menu.


Open in Reference View
Set as Reference Photo
Lock to Second Monitor
Show in Explorer
Go to Folder in Library
Go to Collection
Find Similar Faces...
Edit In
Photo Merge
Set Flag
Set Rating
Set Color Label
Add Shortcut Keyword
Add to Quick Collection
Stacking
People
Create Virtual Copy
Develop Settings
Metadata Presets
Transform
Metadata
Export
Email Photo...
Red
Yellow
Green
Blue
Purple
None

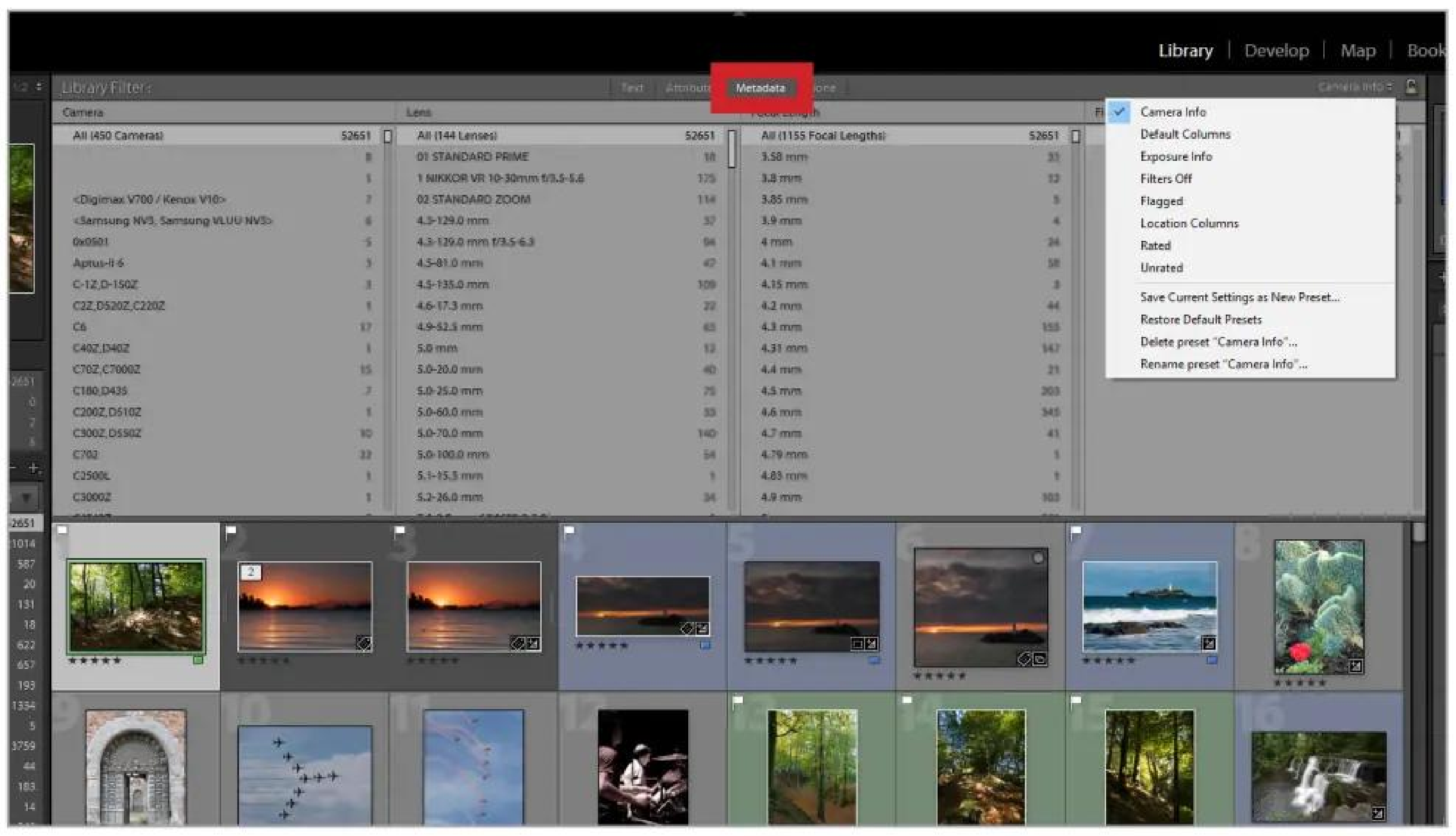
6 There is another way to tag your photos for later sorting, and that is colour labelling. You can apply one of five coloured labels to images. You can apply a label by either clicking on the little box on the lower right edge of the Grid thumbnail or by right-clicking in any view and selecting Set Colour Label from the menu.


Library Filter :
Text
Attribute
Metadata
None

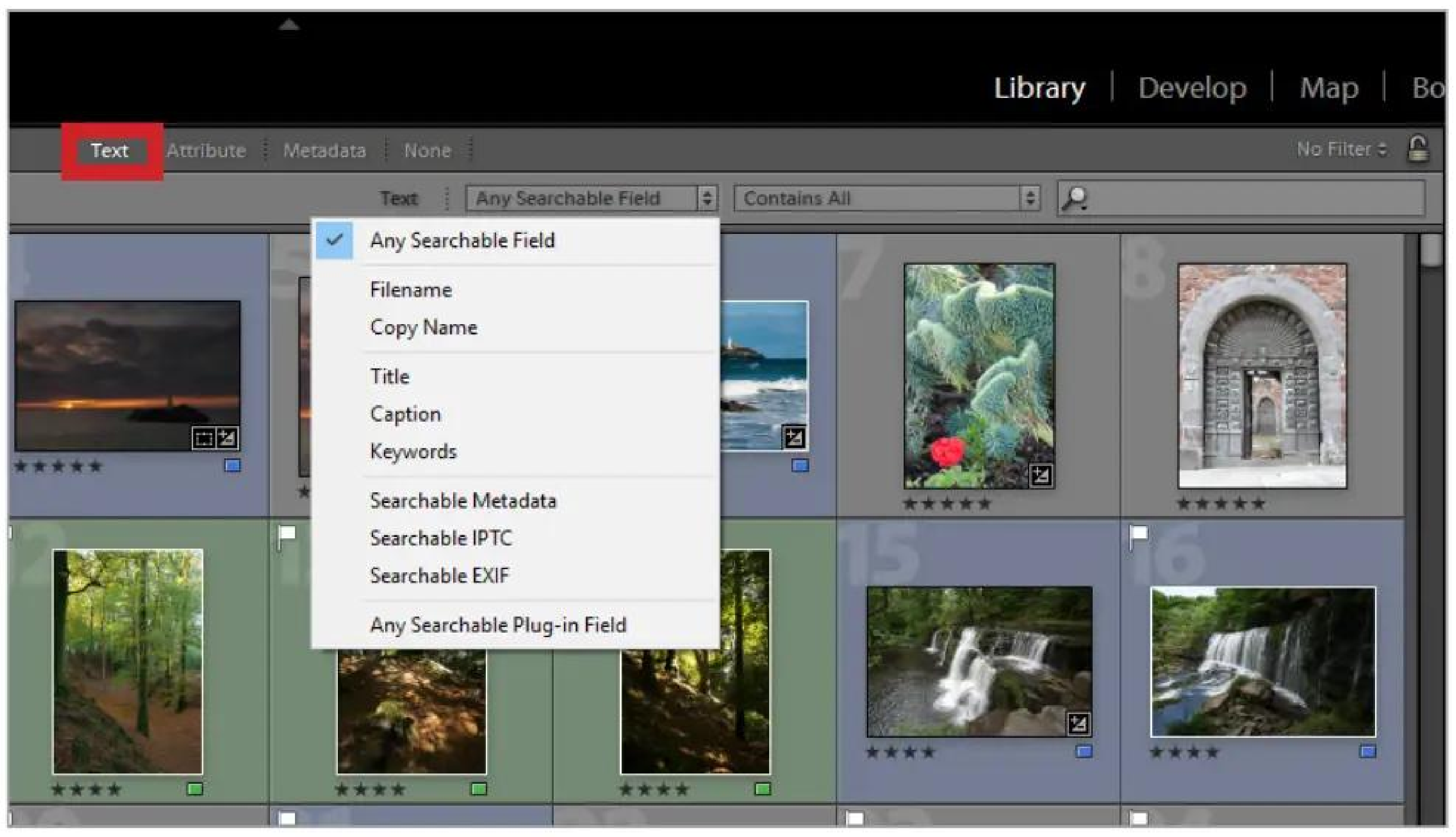
7 Once you've applied ratings, flags and colour labels to your images, you can quickly use these attributes to perform filtered searches on your library. In the Grid view, at the top of the view panel you'll see the Library Filter bar, with four options available: Text, Metadata, Attributes and None. The latter is the default option.


Attribute
Metadata
None
Attribute
Flag
Rating
Filter based on flag status (Flagged Only)

8 If you click on Attributes in the Library Filter bar, you'll see several options. If you click on the Flagged icon, you'll see only images that have been flagged. Similarly, you can choose to see only images over a certain star rating, or only images with one or more colour labels. You can apply several different filters at once.


Library
Develop
Map
Book
Library Filter :
Text
Attribute
Metadata
None
Camera
Lens
Camera Info

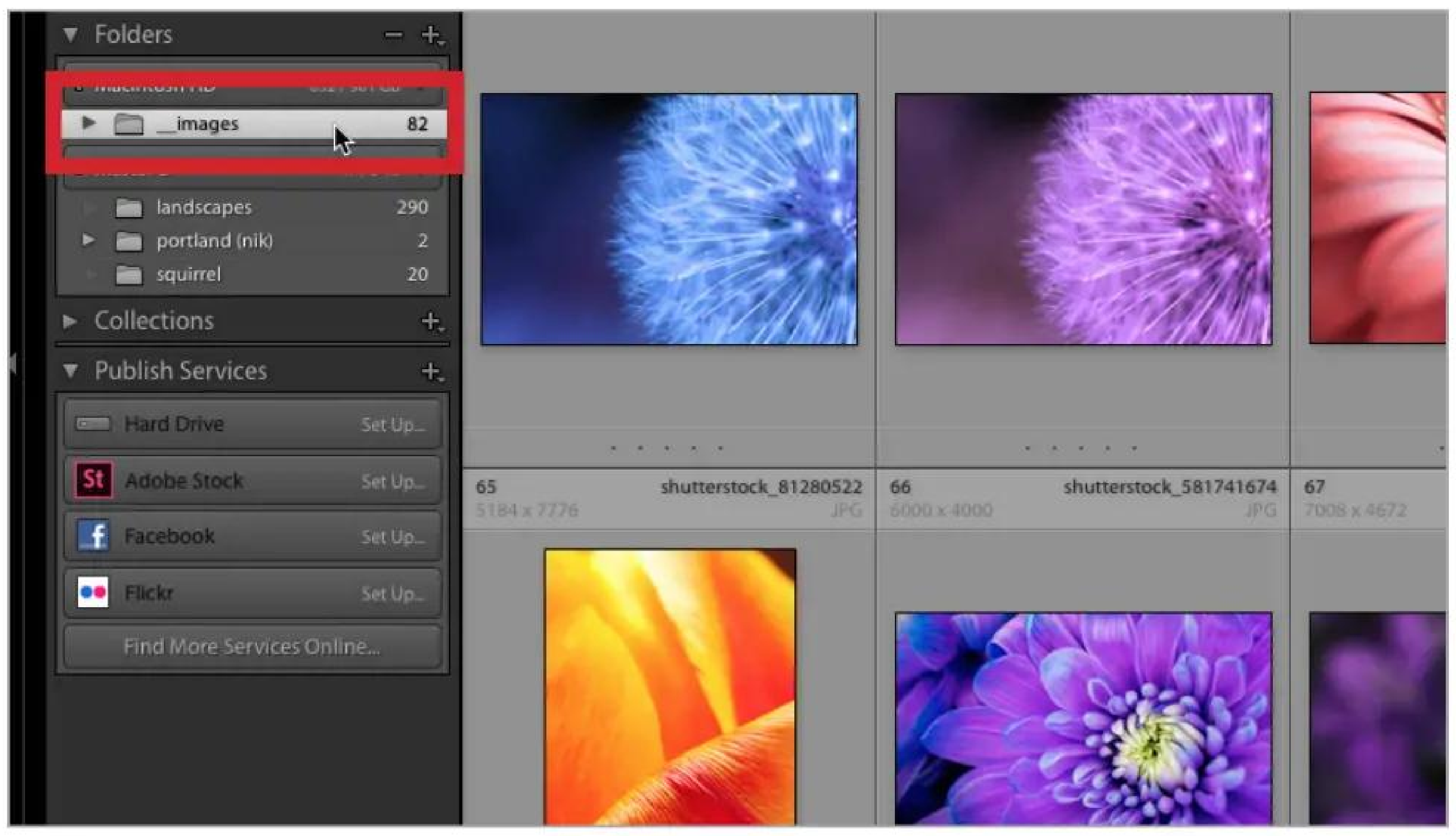
9 Another filter option is Metadata that lets you select only photos taken in a particular year, with a particular camera or lens, or any other searchable metadata field, including detailed location information. This is arguably the most powerful search filter and particularly useful for working professional photographers.


Library
Develop
Map
Text
Attribute
Metadata
None
No Filter
Text
Any Searchable Field
Contains All
Any Searchable Field
Filename
Copy Name
Title
Caption
Keywords
Searchable Metadata
Searchable IPTC
Searchable EXIF
Any Searchable Plug-in Field

10 The Text filter option lets you search in any text field attached to your images. These include the file name, any copy that is attached, the title, caption or keywords and any other searchable EXIF or metadata. This is handy if you title or add descriptive captions to your photos, or if your library includes photos from more than one photographer.

Organising Photos with Collections

If you've been using a digital camera for some years, you probably have thousands of photos stored by now. Lightroom is all about keeping those images organised and accessible, and one great way to do that is by using Collections.


Folders
_images 82
landscapes 290
portland (nik) 2
squirrel 20
Collections
Publish Services
Hard Drive Set Up...
Adobe Stock Set Up...
Facebook Set Up...
Flickr Set Up...
Find More Services Online...
shutterstock_81280522
shutterstock_581741674

1 Quick Collections are a temporary method of quickly organising a group of photos that you want to be able to find easily. In this example, we've got a series of macro close up photos of flowers and we want to group all the photos of certain colours of flower. First, find the folder containing the photos in the Folders sidebar tab.

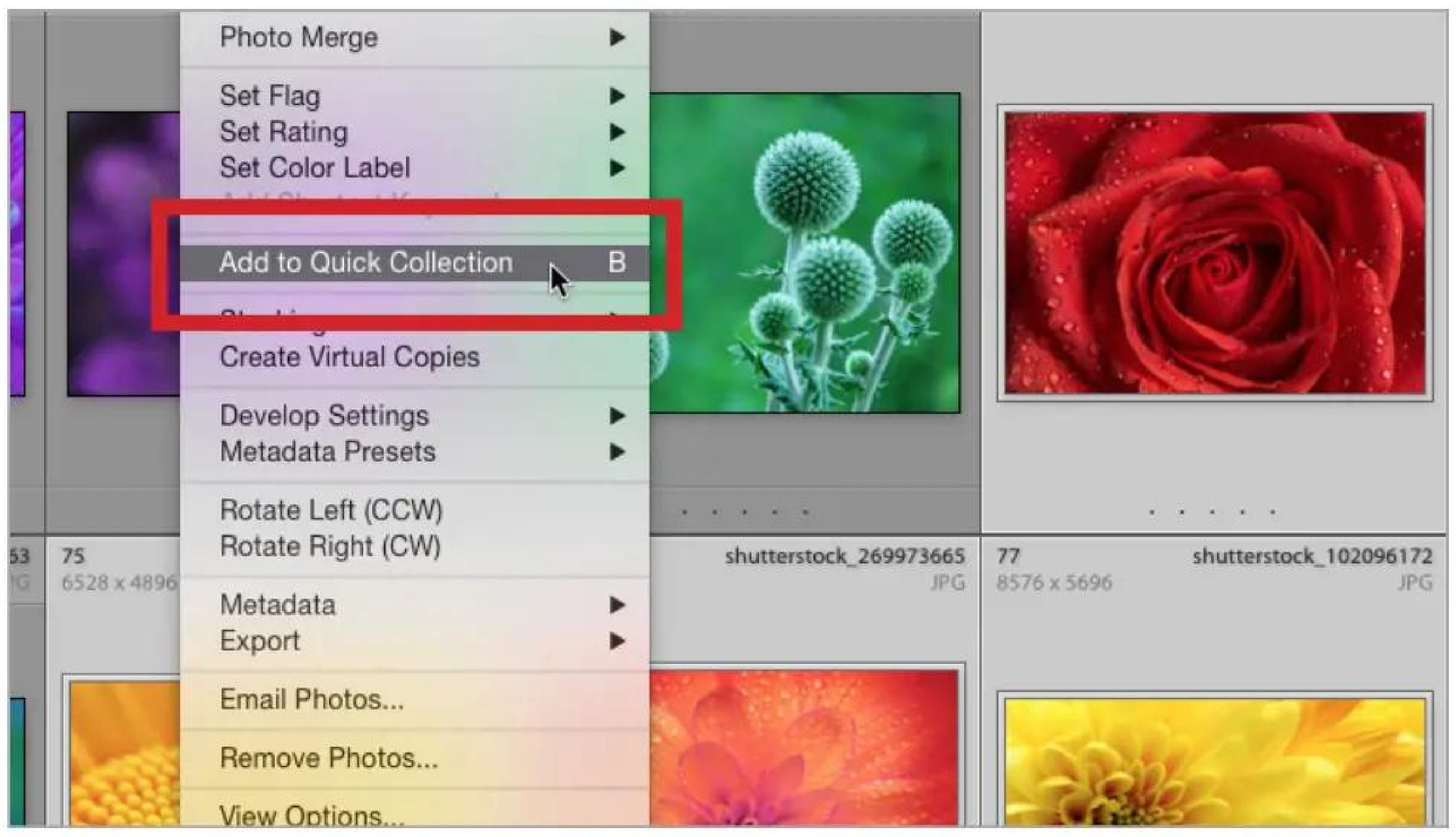
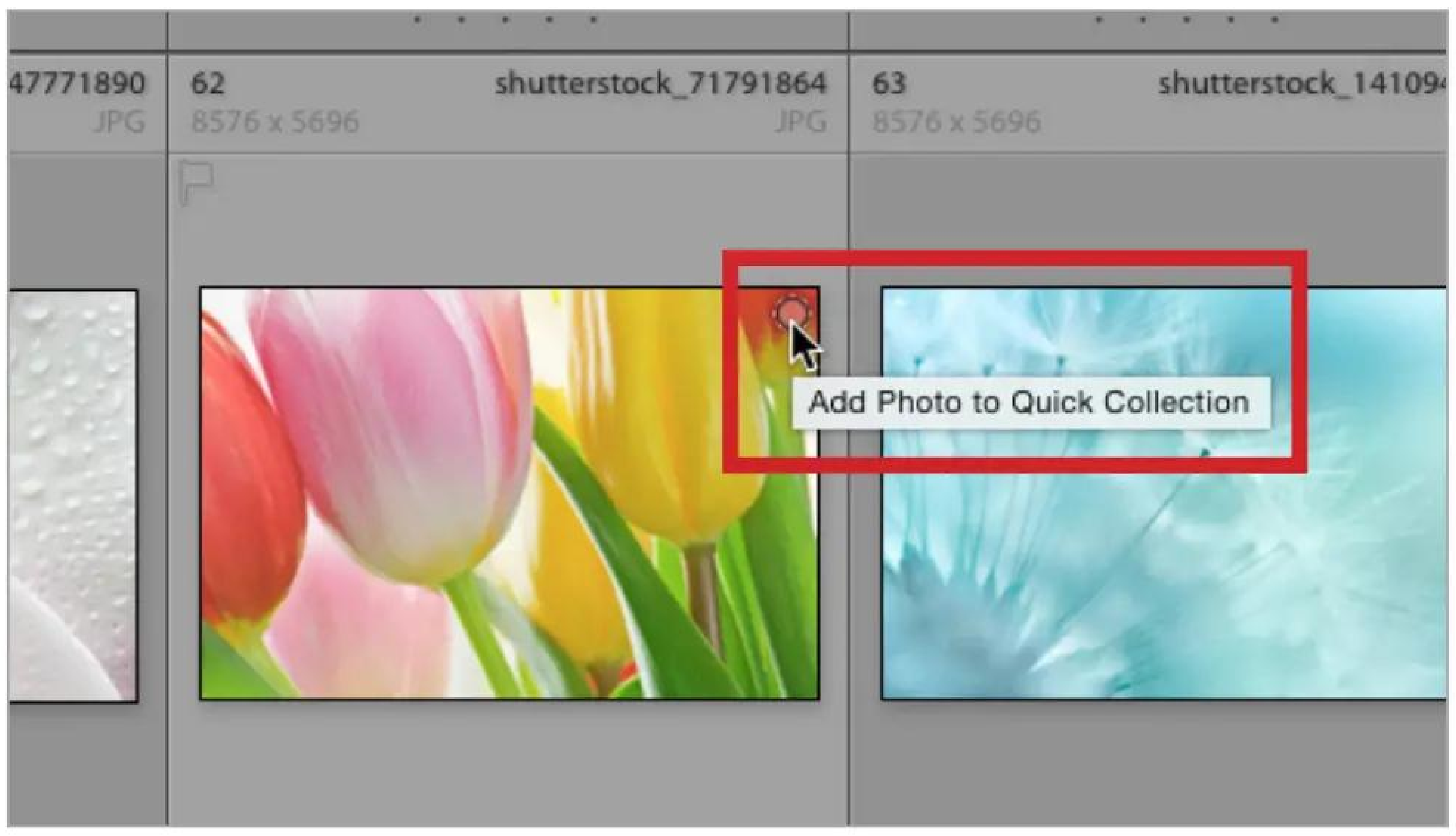
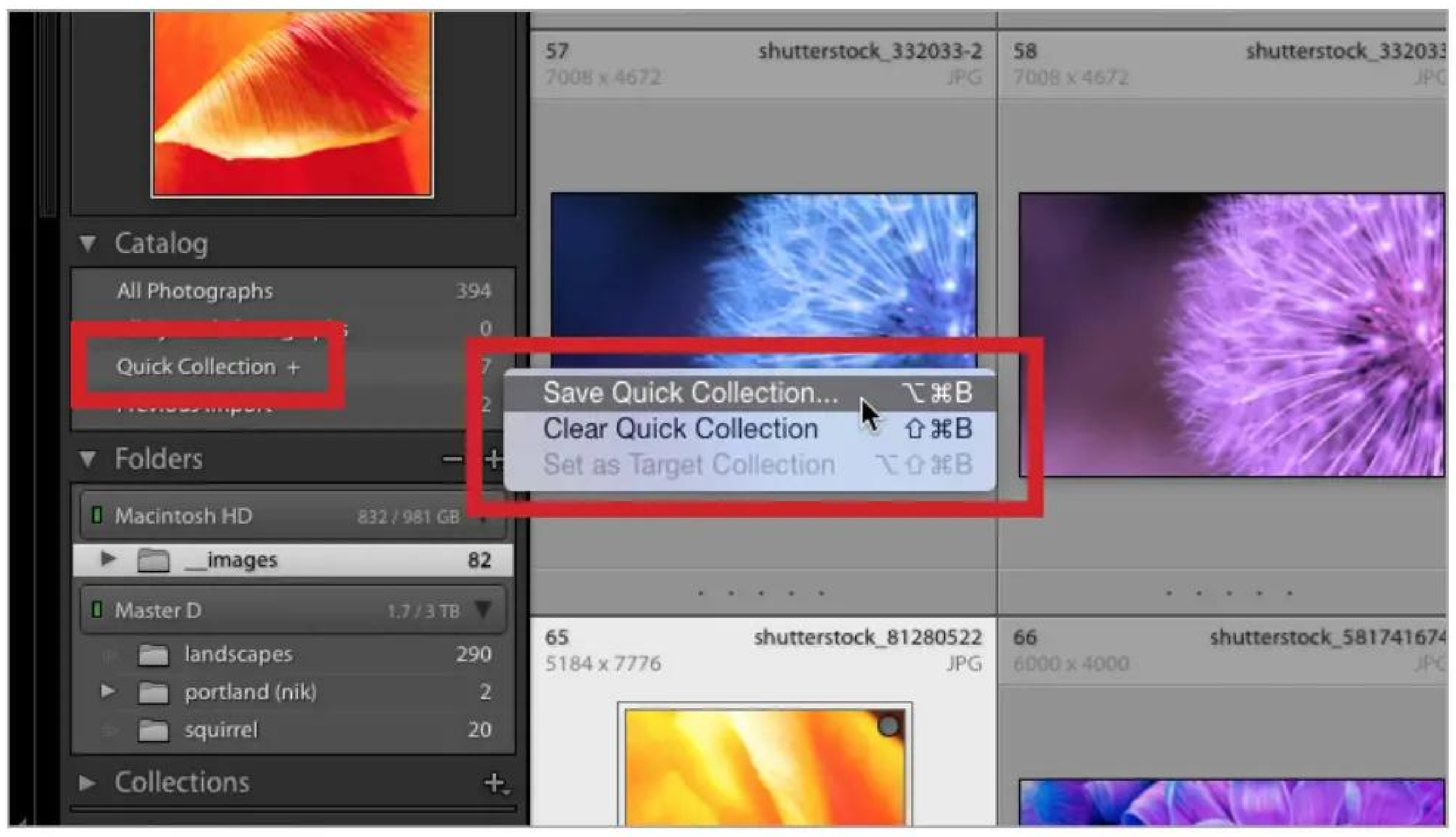


Photo Merge
Set Flag
Set Rating
Set Color Label
Add to Quick Collection B
Create Virtual Copies
Develop Settings
Metadata Presets
Rotate Left (CCW)
Rotate Right (CW)
Metadata
Export
Email Photos...
Remove Photos...
View Options...
shutterstock_269973665
shutterstock_102096172

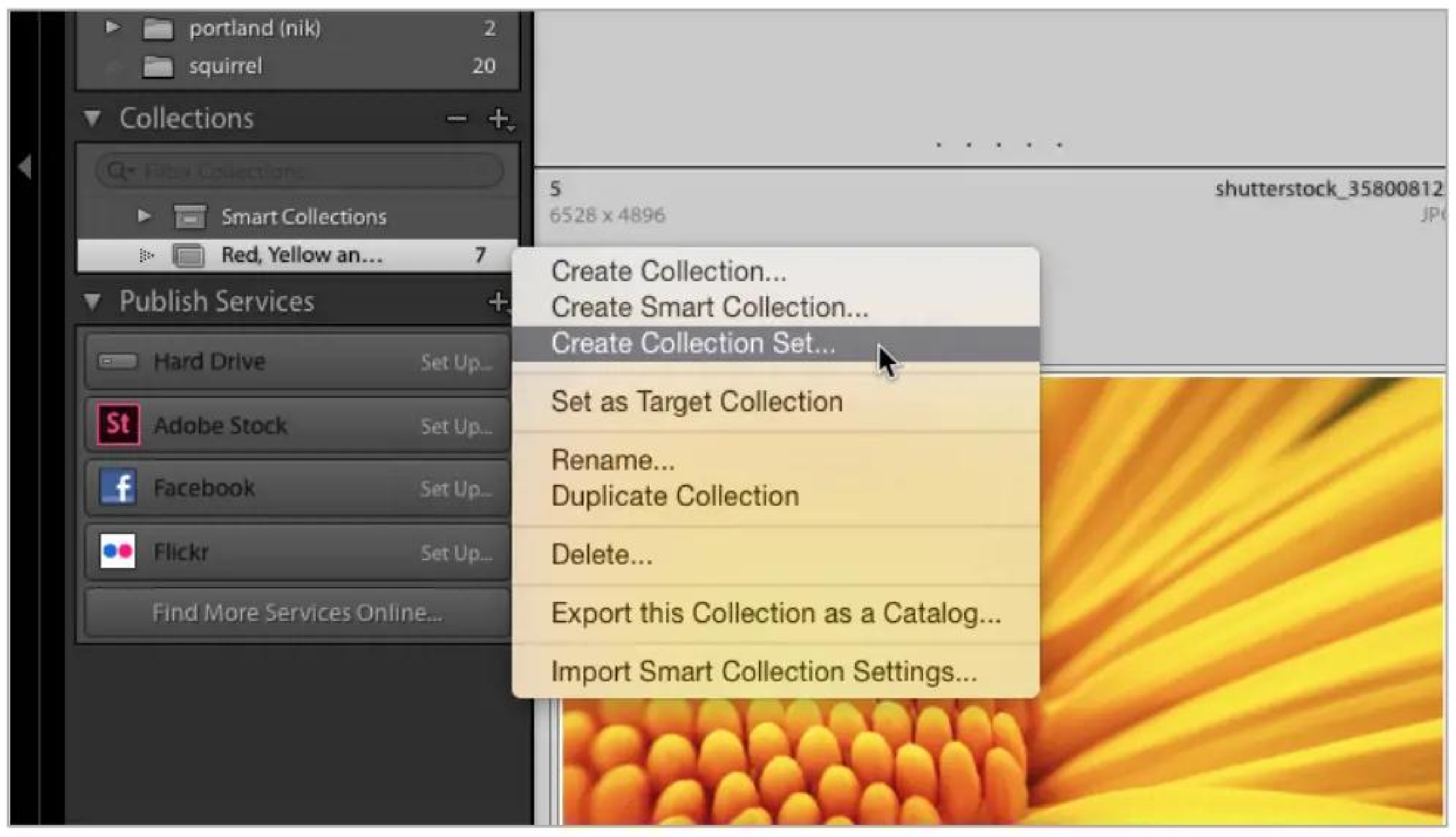
2 Go through your photos and use CTRL-click to select all the photos that you want to add to the Quick Collection, in this case all the shots of flowers that are red, orange and yellow. Once you've highlighted a few, right-click on any of the selected shots and select Add to Quick Collection from the menu that appears.


shutterstock_71791864
shutterstock_14109
Add Photo to Quick Collection

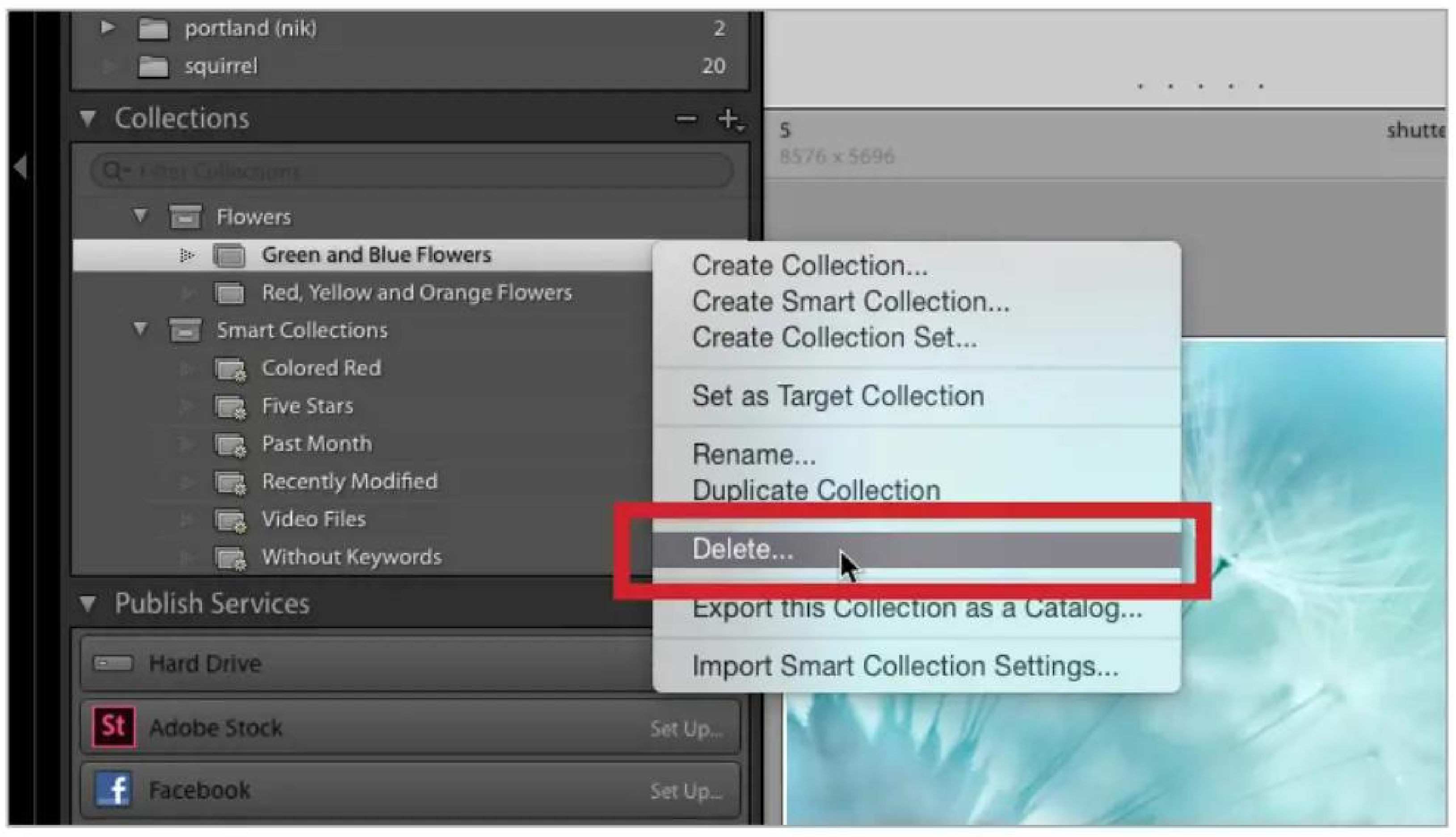
3 You can see that photos are added to the Quick Collection and marked with a small circle in the upper right corner of the thumbnail. If there are any additional photographs that you want to add to the Quick Collection, such as this shot of some tulips, you can either use the menu or simply click on the position of the circle.


Catalog
All Photographs 394
Quick Collection +
Save Quick Collection... ⌥⌘B
Clear Quick Collection ⇧⌘B
Set as Target Collection ⌥⇧⌘B
Folders
Macintosh HD
_images 82
Master D
landscapes 290
portland (nik) 2
squirrel 20
Collections

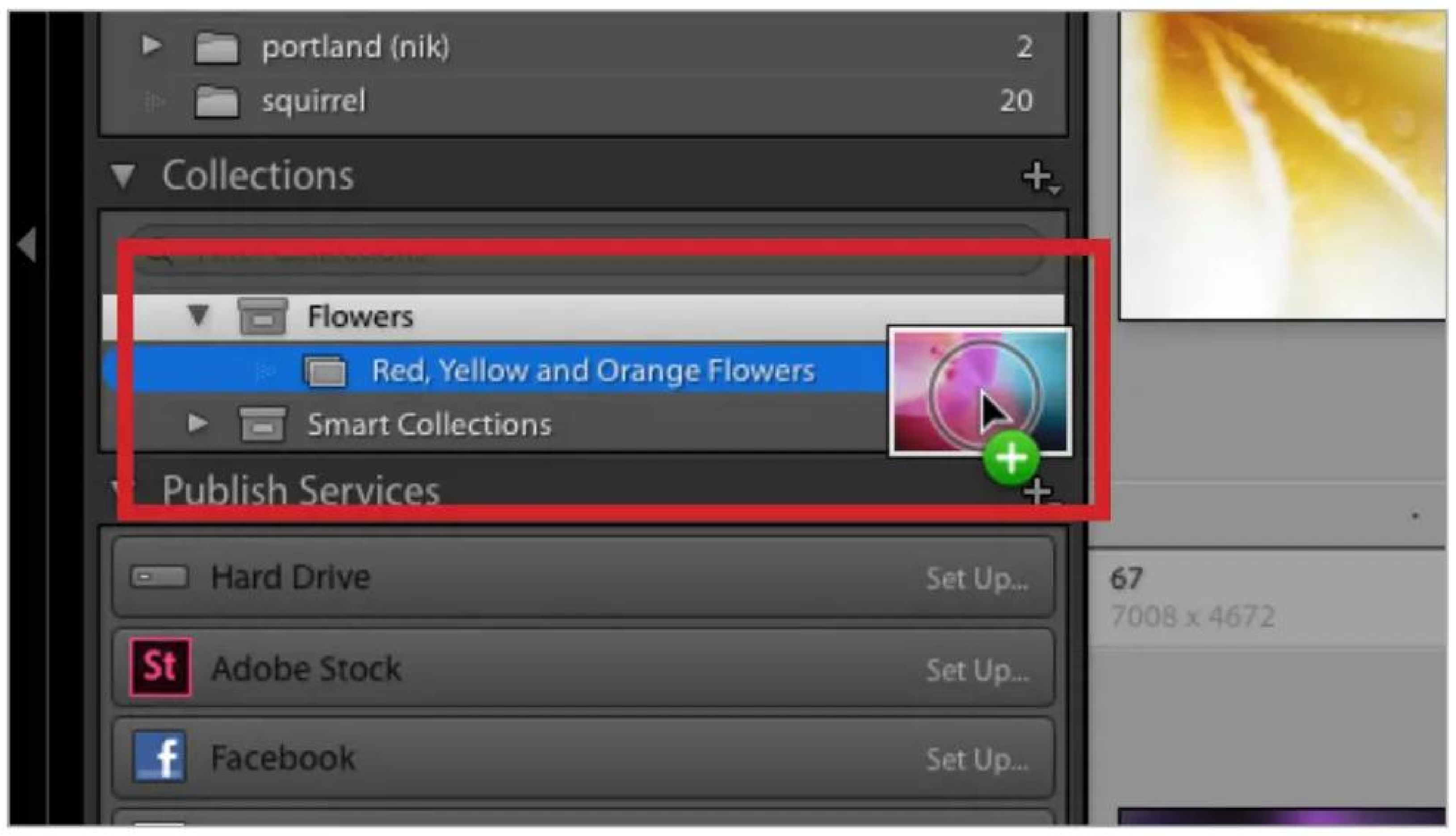
4 You can save your Quick Collection as a permanent collection by right-clicking on the Quick Collections + and selecting Save Quick Collection. Type in a name for your collection and if you want to clear the Quick Collection at the same time, check the box for that option. You'll find your new Collection in the Collections tab.


portland (nik) 2
squirrel 20
Collections
Smart Collections
Red, Yellow an... 7
Publish Services
Hard Drive
Adobe Stock
Facebook
Flickr
Find More Services Online...
shutterstock_35800812
6528 x 4896
Create Collection...
Create Smart Collection...
Create Collection Set...
Set as Target Collection
Rename...
Duplicate Collection
Delete...
Export this Collection as a Catalog...
Import Smart Collection Settings...

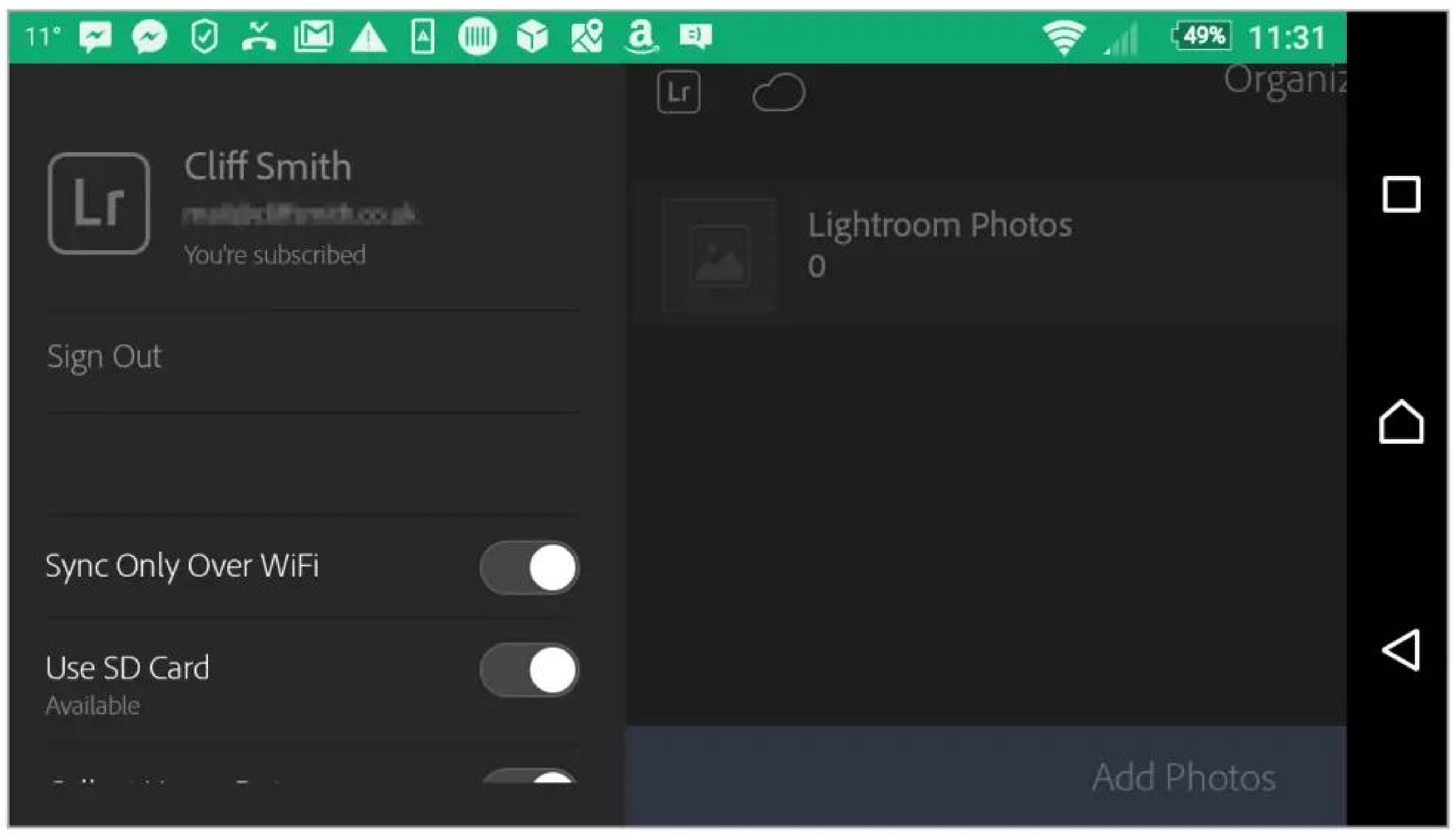
5 You can nest groups of collections inside one another by creating a Collection Set. Once you've created a set (our example here is called Flowers), you can create further sets or collections within it and move collections into the set by dragging and dropping in the Collections sidebar tab. This way you can build-up a useful collection structure.


portland (nik) 2
squirrel 20
Collections
Flowers
Green and Blue Flowers
Red, Yellow and Orange Flowers
Smart Collections
Colored Red
Five Stars
Past Month
Recently Modified
Video Files
Without Keywords
Publish Services
Hard Drive
Adobe Stock
Facebook
Create Collection...
Create Smart Collection...
Create Collection Set...
Set as Target Collection
Rename...
Duplicate Collection
Delete...
Export this Collection as a Catalog...
Import Smart Collection Settings...

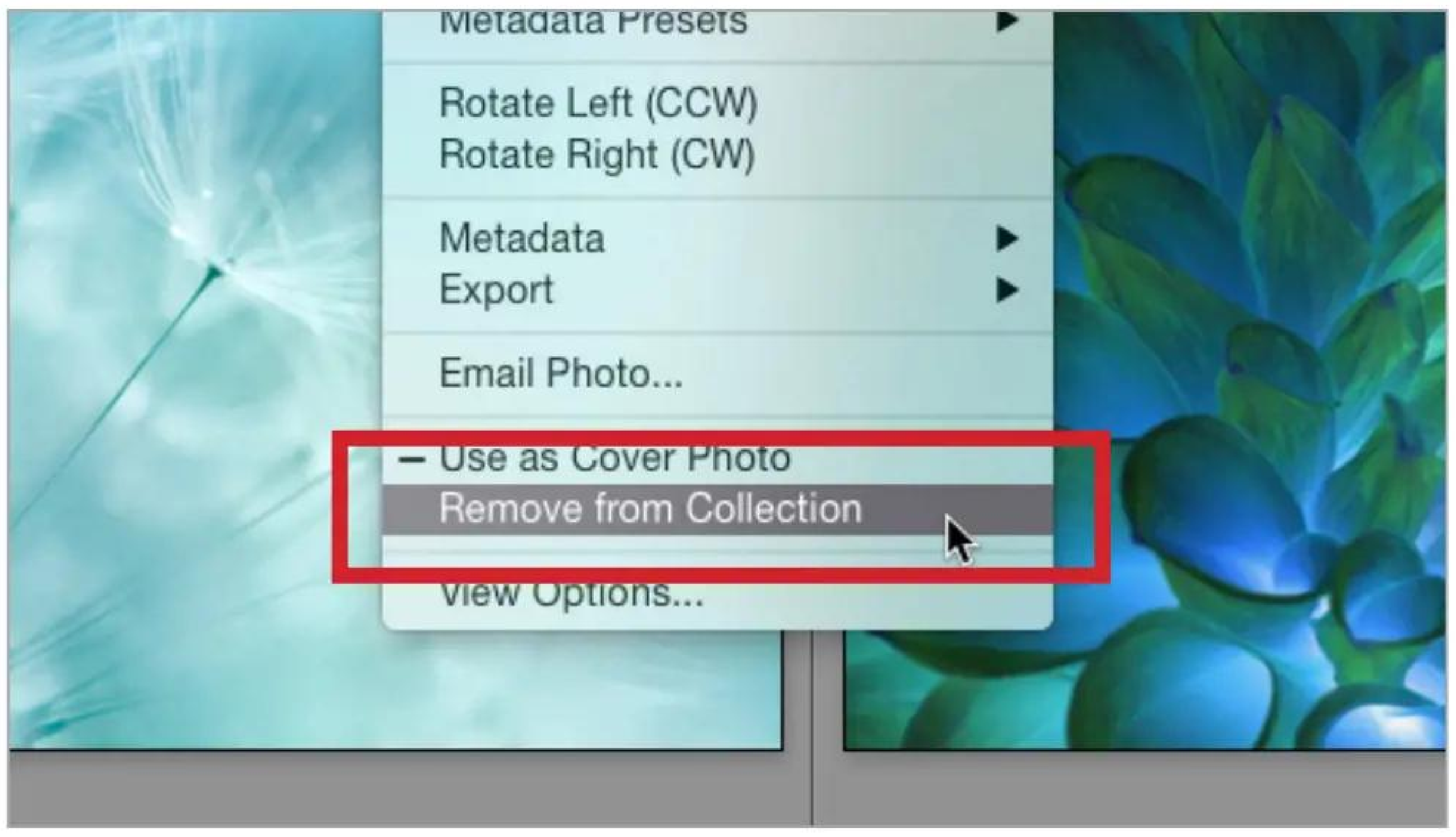
8 You can delete a collection by either right-clicking on it in the Collections tab and selecting Delete from the pop-up menu or by highlighting the collection and clicking on the minus sign button on the Collections tab title bar. Either way, doing so does not actually delete the photos from your library or hard drive, just gets rid of the collection.


portland (nik) 2
squirrel 20
Collections
Flowers
Red, Yellow and Orange Flowers
Smart Collections
Publish Services
Hard Drive
Adobe Stock
Facebook
67
7008 x 4672

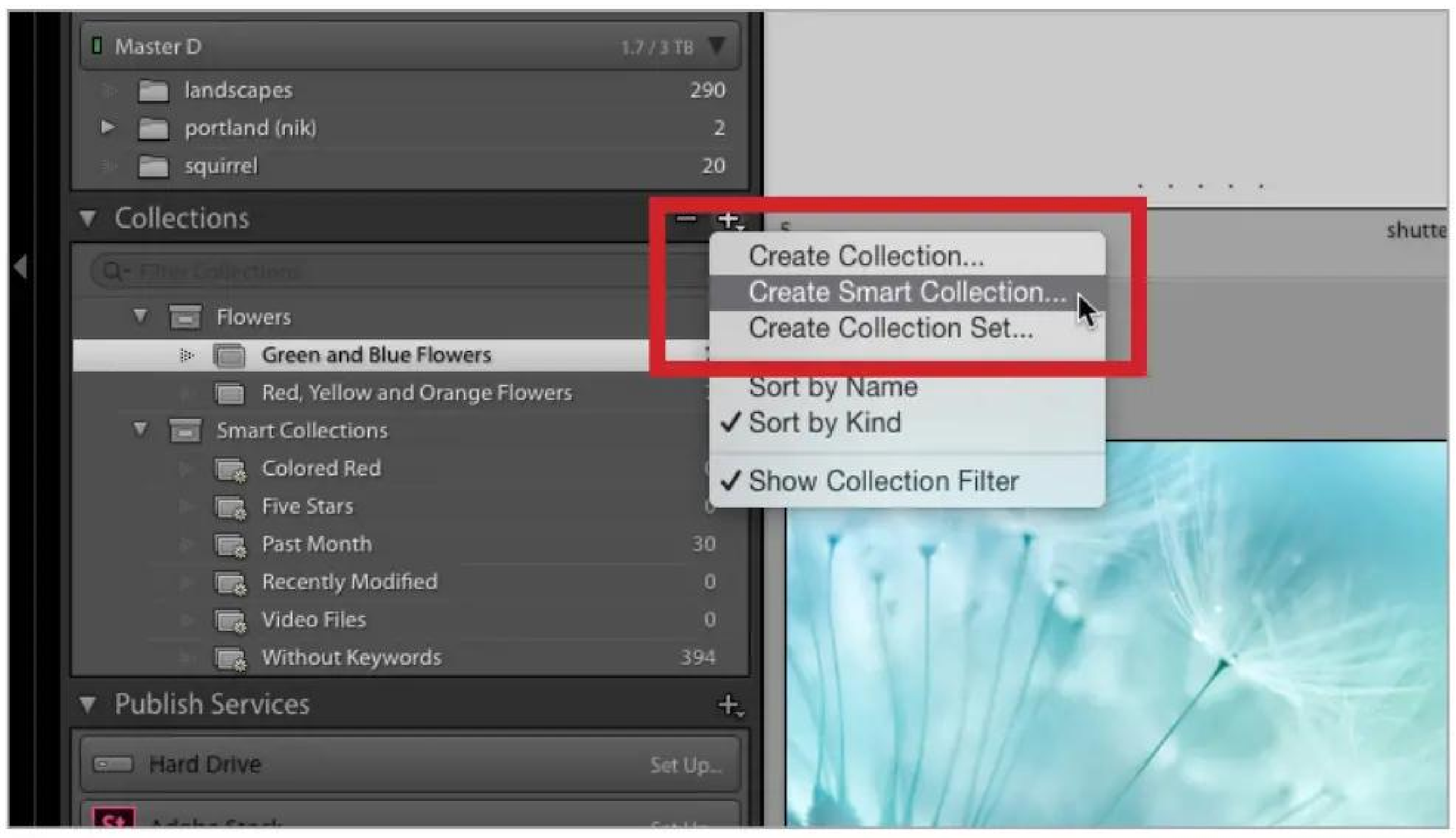
6 You can add more photos to an existing collection by dragging them from the Grid view onto the appropriate collection in the sidebar. You can select several photos at once and drag the whole stack over. Note that you have to click on the thumbnail, not on the surrounding box, and drop them over the collection name, not the folder icon.


11:31
Cliff Smith
You're subscribed
Sign Out
Lightroom Photos
0
Sync Only Over WiFi
Use SD Card
Available
Add Photos

9 You can share Collections between the Lightroom desktop application and the mobile apps for Android or iOS. If you add photos to collections on one device, they will be automatically synchronised between all your devices. We'll cover this in more detail when we look at the Lightroom Mobile app in a later chapter.


Metadata Presets
Rotate Left (CCW)
Rotate Right (CW)
Metadata
Export
Email Photo...
Use as Cover Photo
Remove from Collection
View Options...

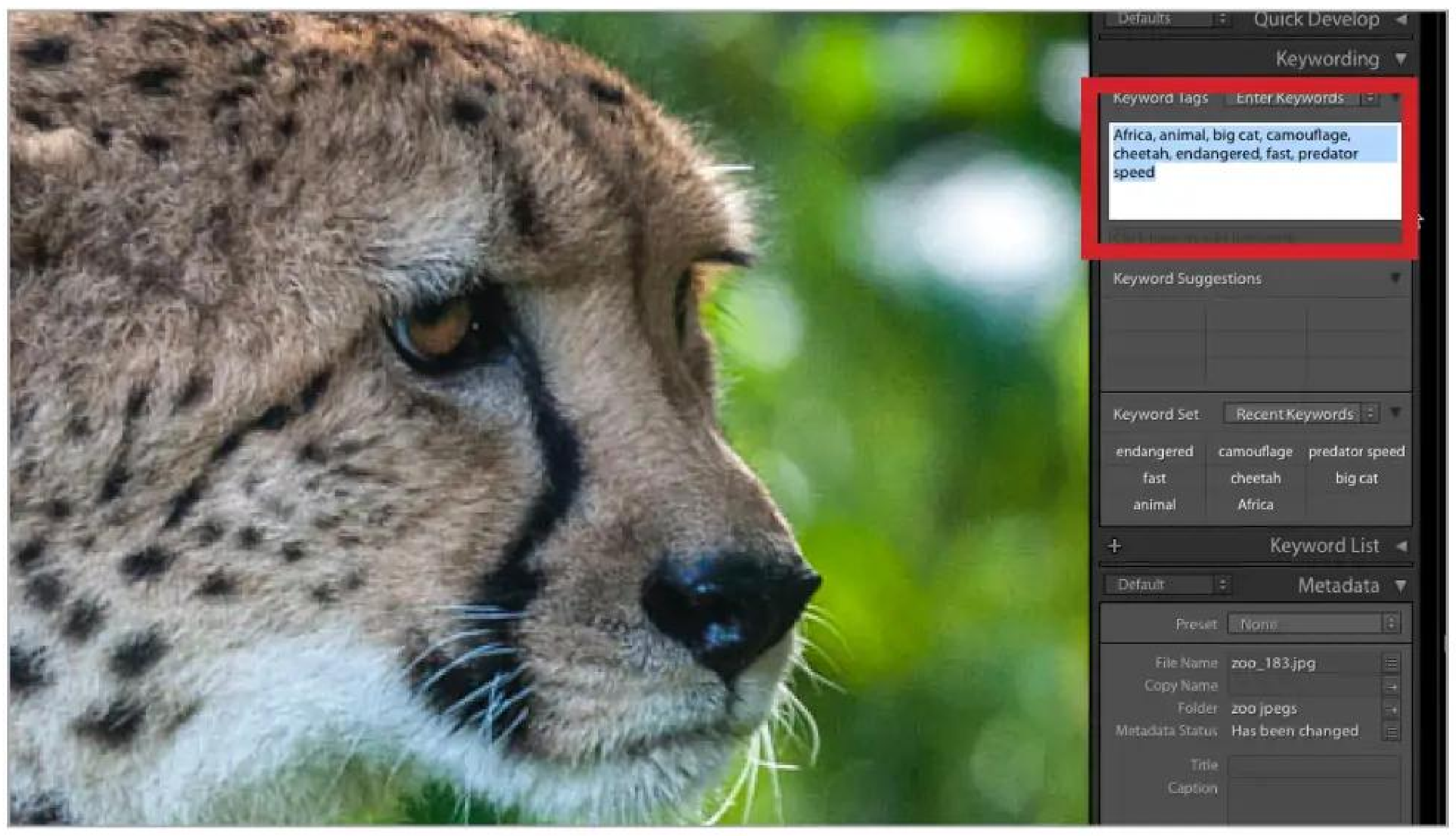
7 To remove a photo from a collection, simply right-click on the thumbnail and select Remove from Collection from the pop-up menu. Note that you can only remove a photo from within the actual Collection of which it is a part and not from any Collection Set within which it is nested. Removing a photo does not delete it from your Library.


Master D
landscapes 290
portland (nik) 2
squirrel 20
Collections
Flowers
Green and Blue Flowers
Red, Yellow and Orange Flowers
Smart Collections
Colored Red
Five Stars
Past Month
Recently Modified
Video Files
Without Keywords
Publish Services
Hard Drive
Create Collection...
Create Smart Collection...
Create Collection Set...
Sort by Name
✓ Sort by Kind
✓ Show Collection Filter

10 Lightroom can automatically build Smart Collections for you. Click on the plus sign on the Collections tab title bar and select Create Smart Collection. You can set up multiple rules for selection, such as rating, caption text, image size etc. and apply them to instantly build a collection. In all other ways a Smart Collection behaves exactly like any other.

Searching for Your Images

Adobe Lightroom offers many ways to search for particular images or groups of images but some of them require a little bit of setting up to get the most out of them. Once you get things organised though, you'll never lose an image again!



Keyword Tags: Enter Keywords

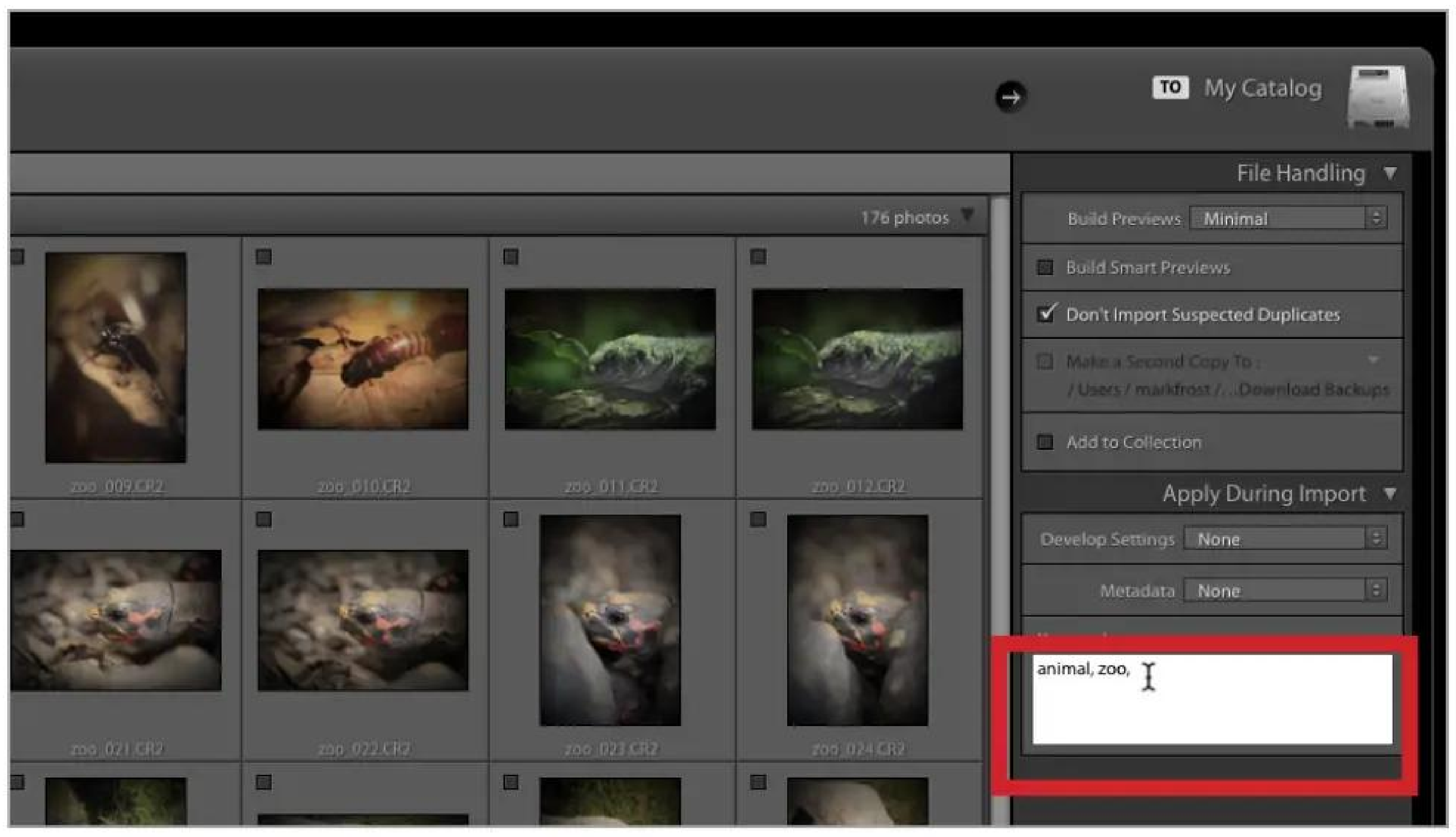
Africa, animal, big cat, camouflage, cheetah, endangered, fast, predator speed

Keyword Set: Recent Keywords

File Name: zoo_183.jpg
Folder: zoo jpegs
Metadata Status: Has been changed

Defaults
Quick Develop
Keywording
Keyword Suggestions
endangered
camouflage
predator speed
fast
cheetah
big cat
animal
Africa
Keyword List
Default
Metadata
Preset
None
Copy Name
Title
Caption

1 The best way to make your library searchable is by applying keywords to your photos. Keywording is more art than science; you should add words that describe the image but also ones that describe the circumstances. For example, this shot has the keywords: Africa, animal, big cat, camouflage, cheetah, endangered, fast, predator and speed.



Build Previews: Minimal

☐ Build Smart Previews

☑ Don't Import Suspected Duplicates

☐ Make a Second Copy To : / Users / markfrost / ... Download Backups

☐ Add to Collection

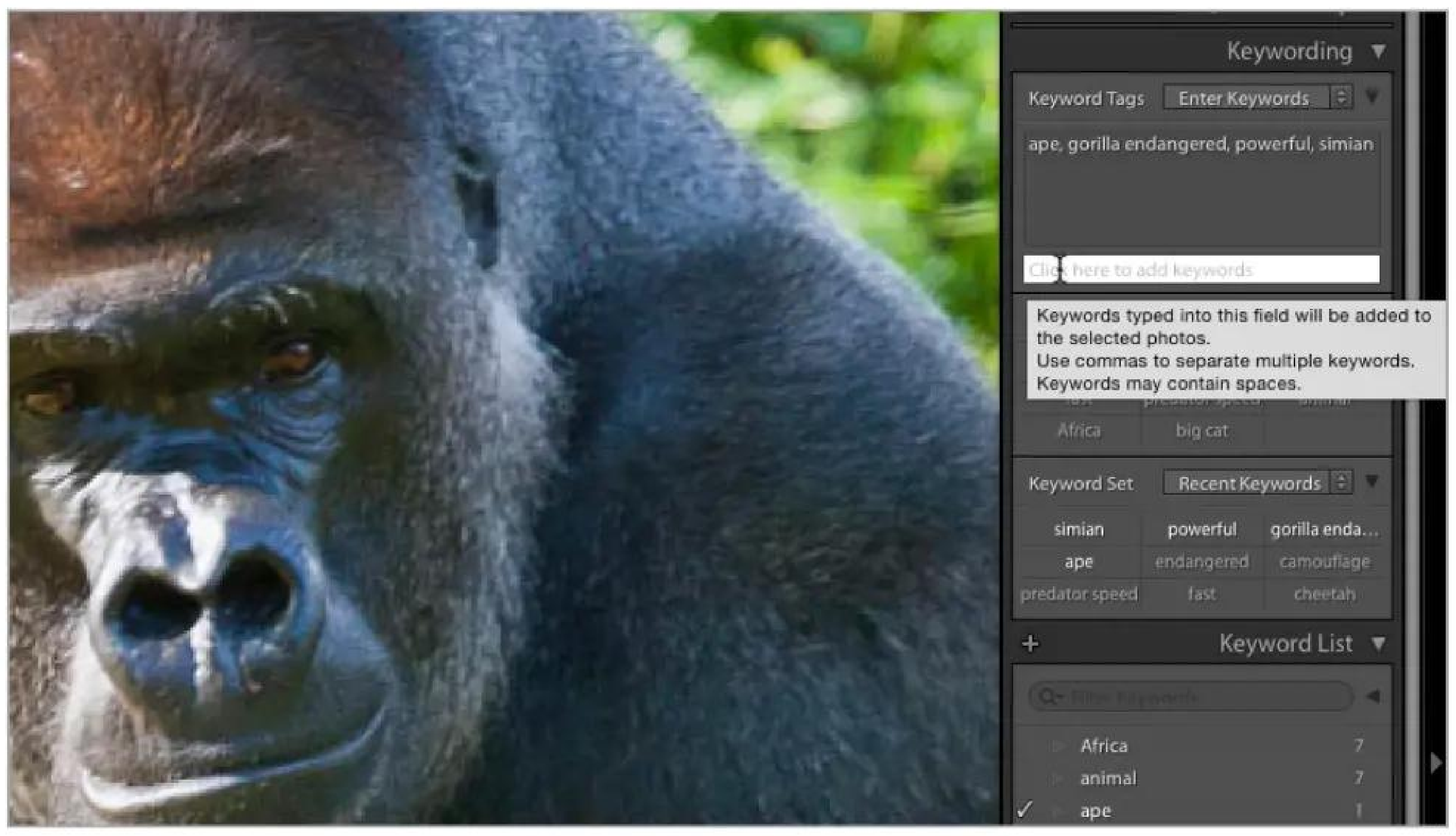
Develop Settings: None

Metadata: None

animal, zoo,

TO
My Catalog
File Handling
Apply During Import
176 photos

2 The quickest and easiest way to apply keywords is during the import process. When you click on the Import button, along with your images you'll see the Apply During Import option, including a panel for keywords that will be added to all the images imported in that batch. You can always apply more keywords later but these first few will help.



Keyword Tags: Enter Keywords

ape, gorilla endangered, powerful, simian

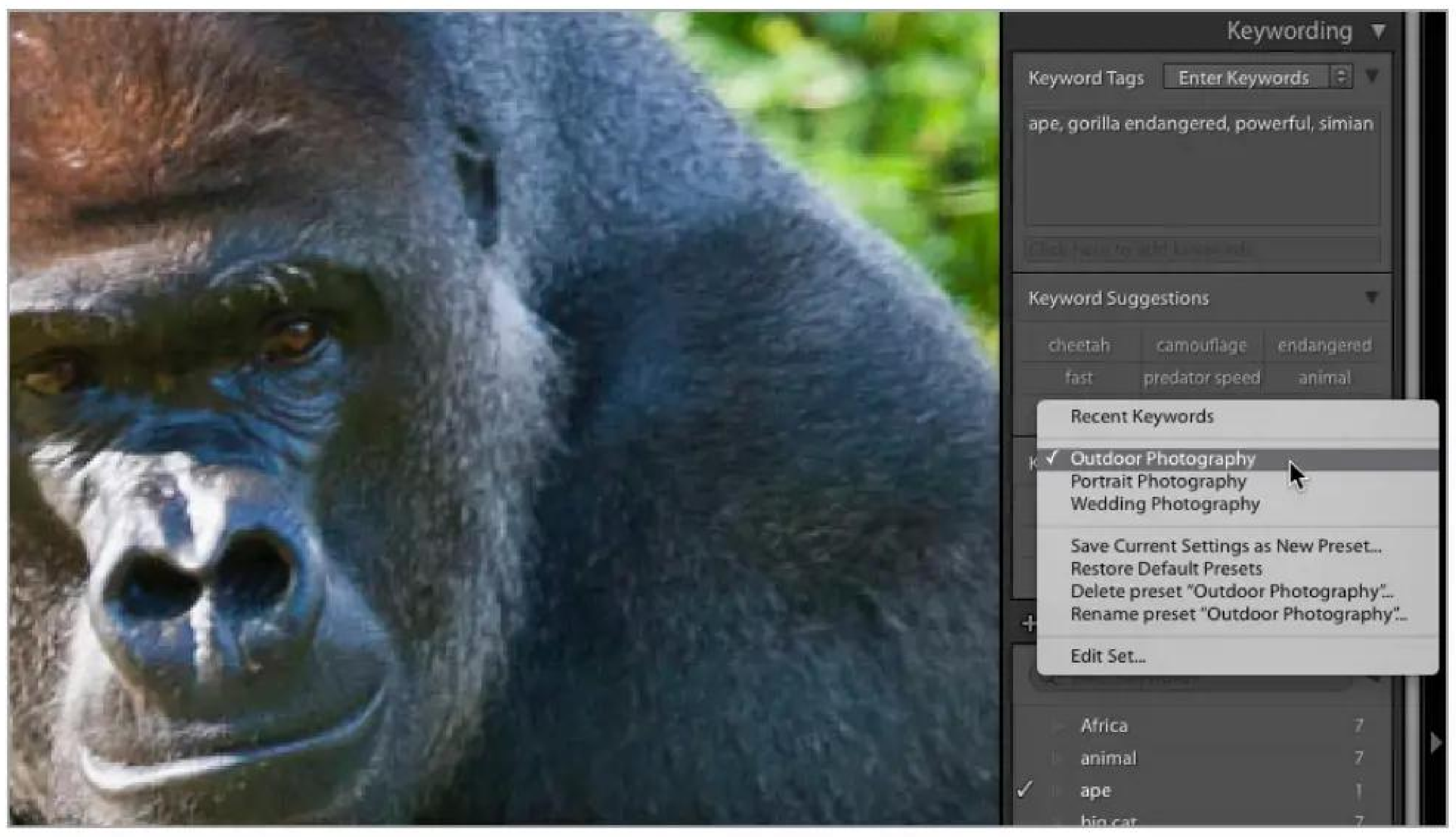
Click here to add keywords

Keywords typed into this field will be added to the selected photos.
Use commas to separate multiple keywords.
Keywords may contain spaces.

Keyword Set: Recent Keywords

Keywording
Africa
big cat
simian
powerful
gorilla enda...
ape
endangered
camouflage
predator speed
fast
cheetah
Keyword List
Africa 7
animal 7
ape 1

3 You can apply keywords manually to images that have already been imported. In the Library view, in the right-hand sidebar you'll find the Keywording tab. To add a keyword, you can type it into the 'Click here to add keywords' bar, or select from the Keyword Suggestions panel. Keywords are separated by commas and can contain spaces.

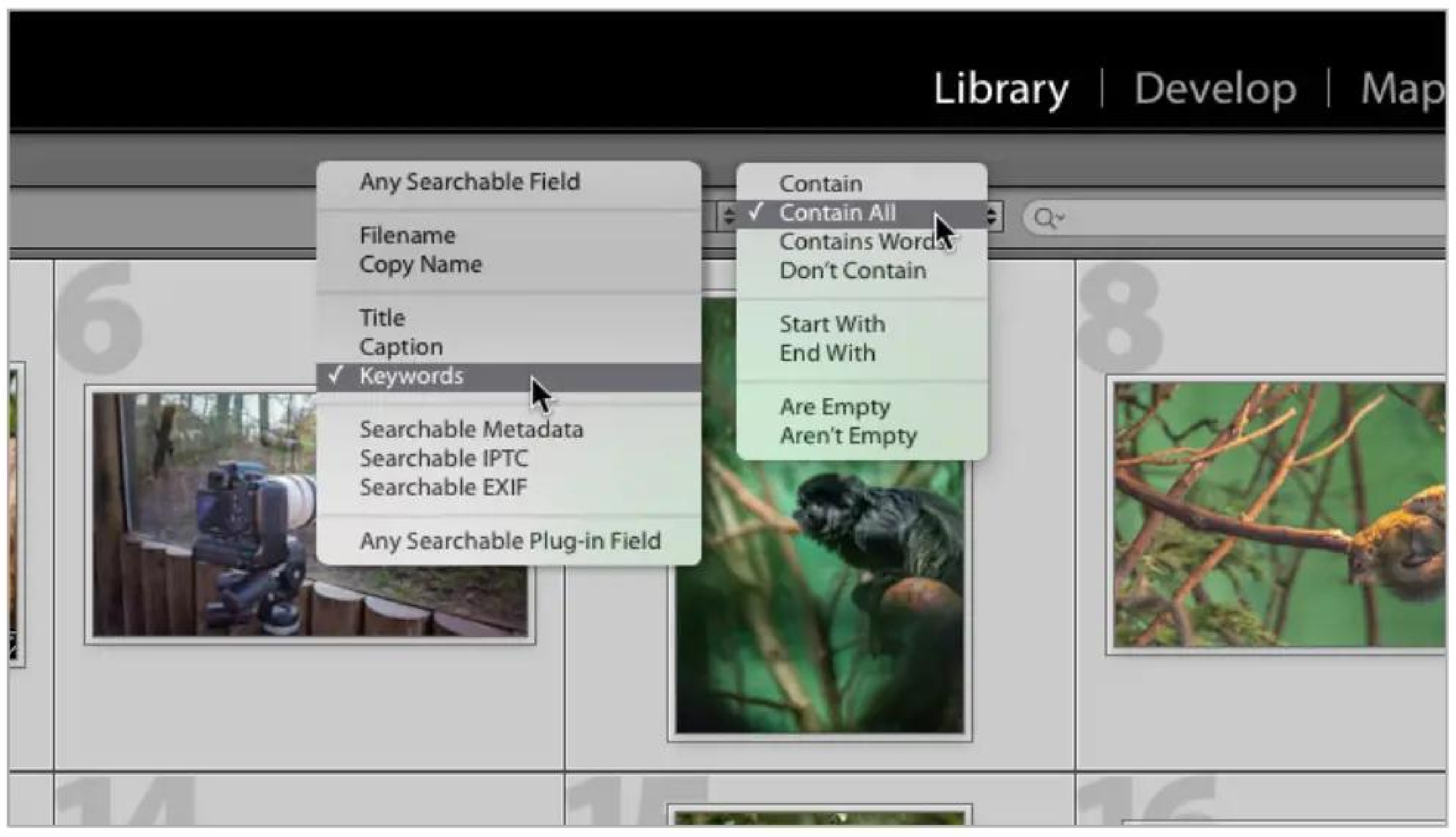


Keyword Tags: Enter Keywords

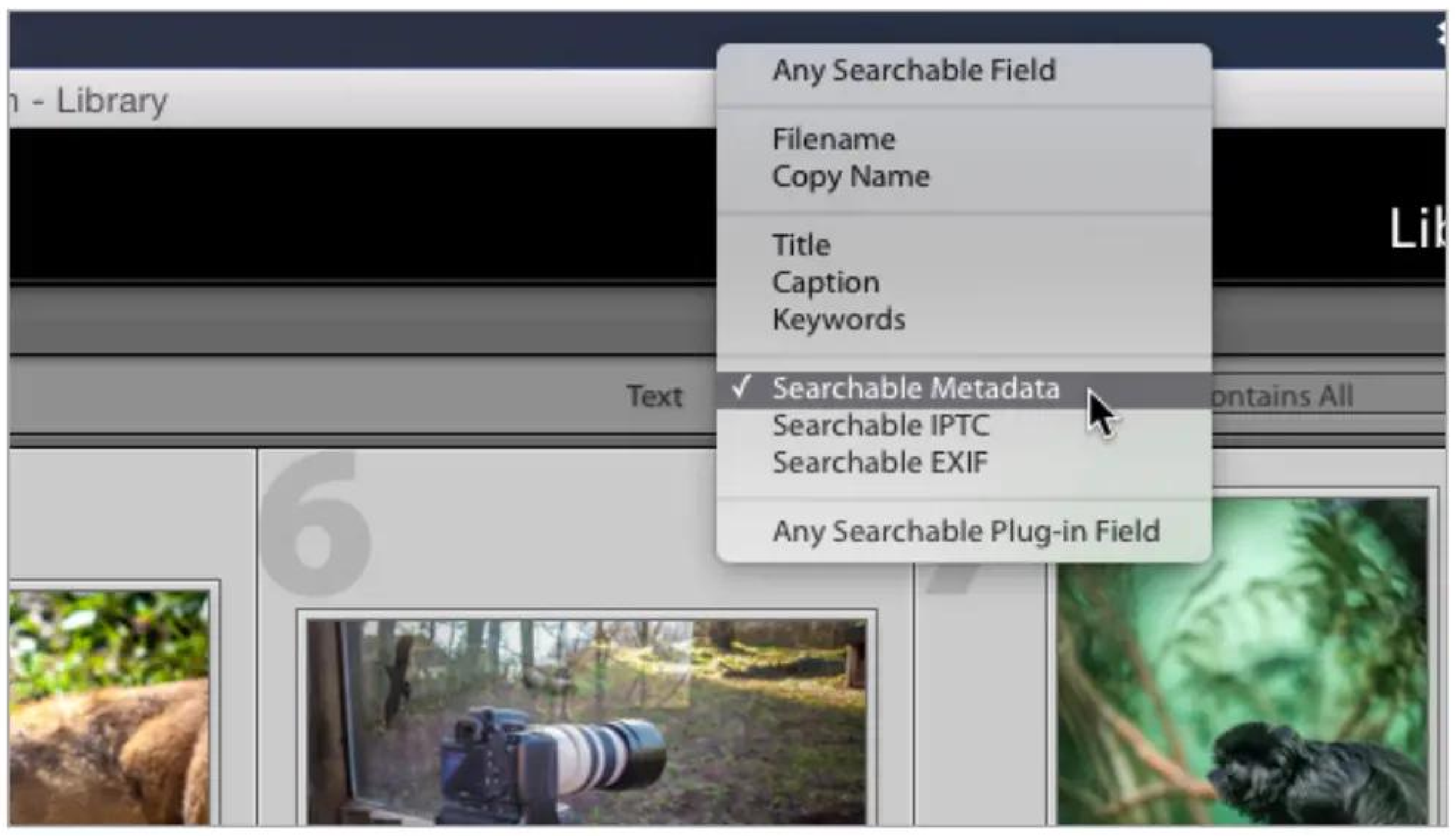
ape, gorilla endangered, powerful, simian

Keywording
Keyword Suggestions
cheetah
camouflage
endangered
fast
predator speed
animal
Recent Keywords
✓ Outdoor Photography
Portrait Photography
Wedding Photography
Save Current Settings as New Preset...
Restore Default Presets
Delete preset "Outdoor Photography"...
Rename preset "Outdoor Photography"...
Edit Set...
Africa 7
animal 7
ape 1
big cat 7

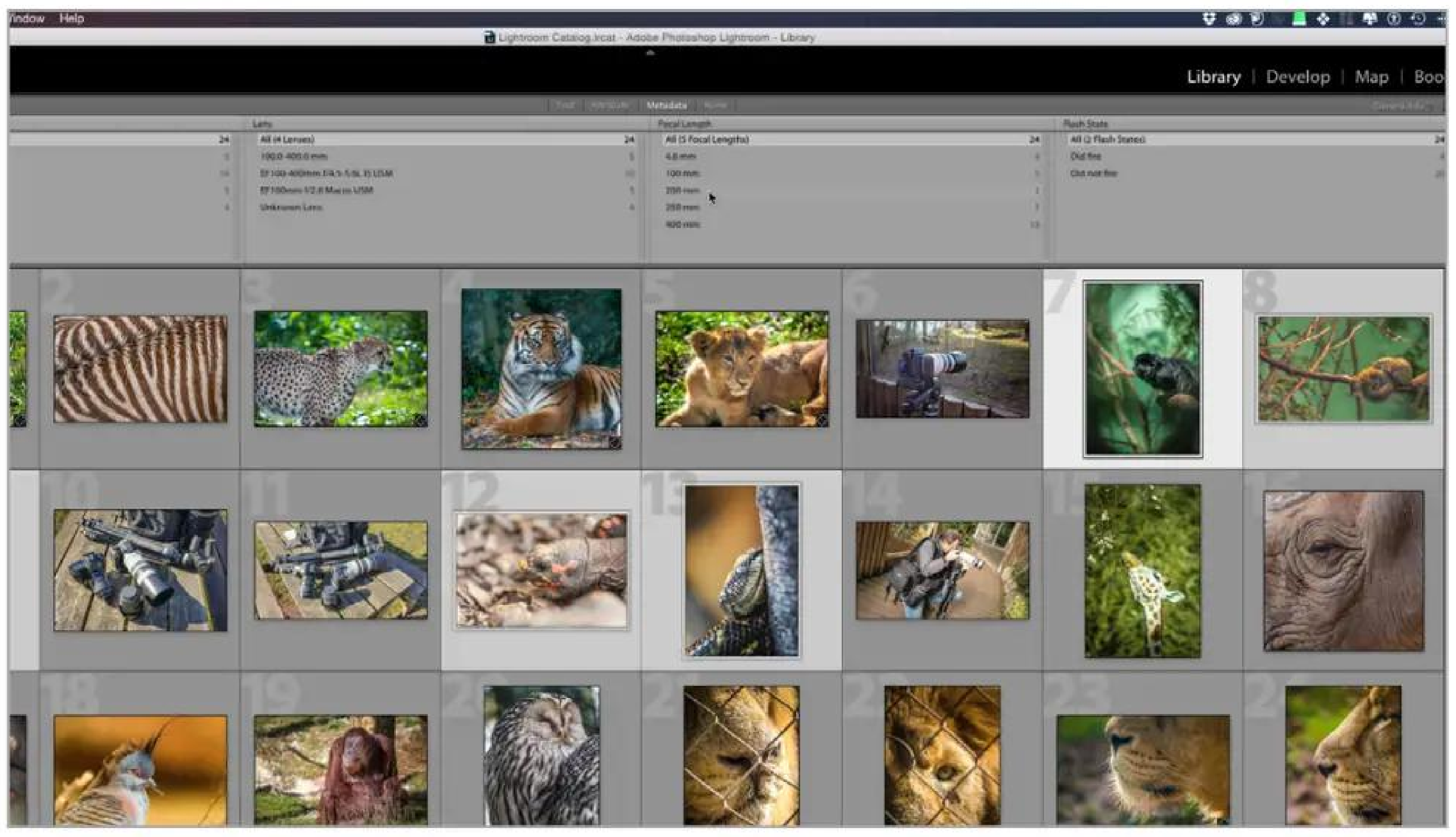
4 Lightroom includes preset Keyword Sets, including Outdoor Photography, Portrait Photography and Wedding Photography; but you can build and save your own personalised keyword sets, which is very useful if you regularly photograph similar subjects or in similar situations. You can also edit or delete preset and personal keyword sets and restore defaults.


Library | Develop | Map
Any Searchable Field
Filename
Copy Name
Title
Caption
✓ Keywords
Searchable Metadata
Searchable IPTC
Searchable EXIF
Any Searchable Plug-in Field
Contain
✓ Contain All
Contains Words
Don't Contain
Start With
End With
Are Empty
Aren't Empty

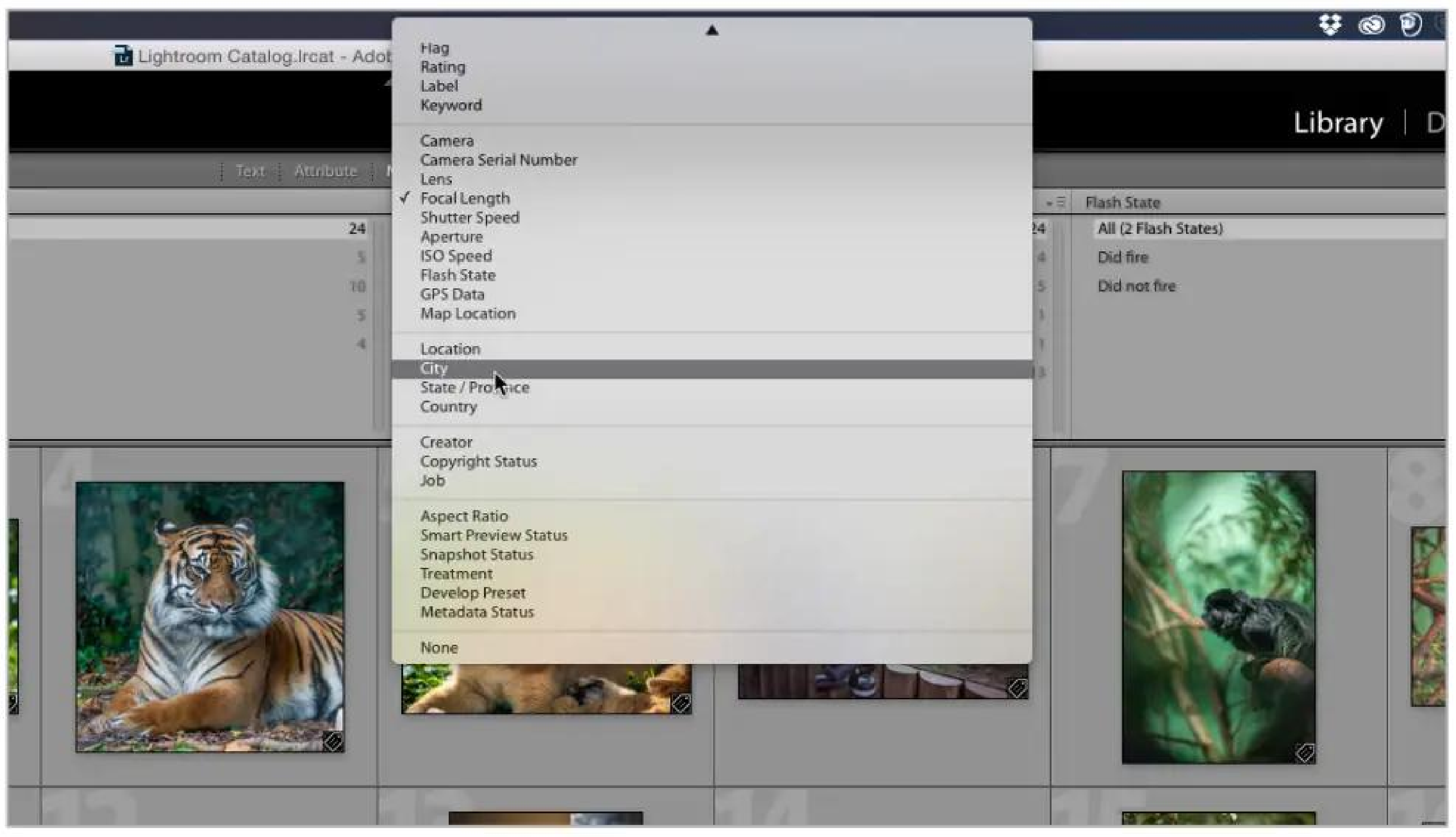
5 Once you've applied keywords to your photos, you can use those keywords to search or filter your photo library, helping you find specific images. In the Library Grid view, you'll see a selection of filters at the top of the screen. Select Text, and choose Keywords from the drop-down menu. You can also choose to filter inclusively or exclusively.


- Library
Lil
Text
ontains All
Any Searchable Field
Filename
Copy Name
Title
Caption
Keywords
✓ Searchable Metadata
Searchable IPTC
Searchable EXIF
Any Searchable Plug-in Field

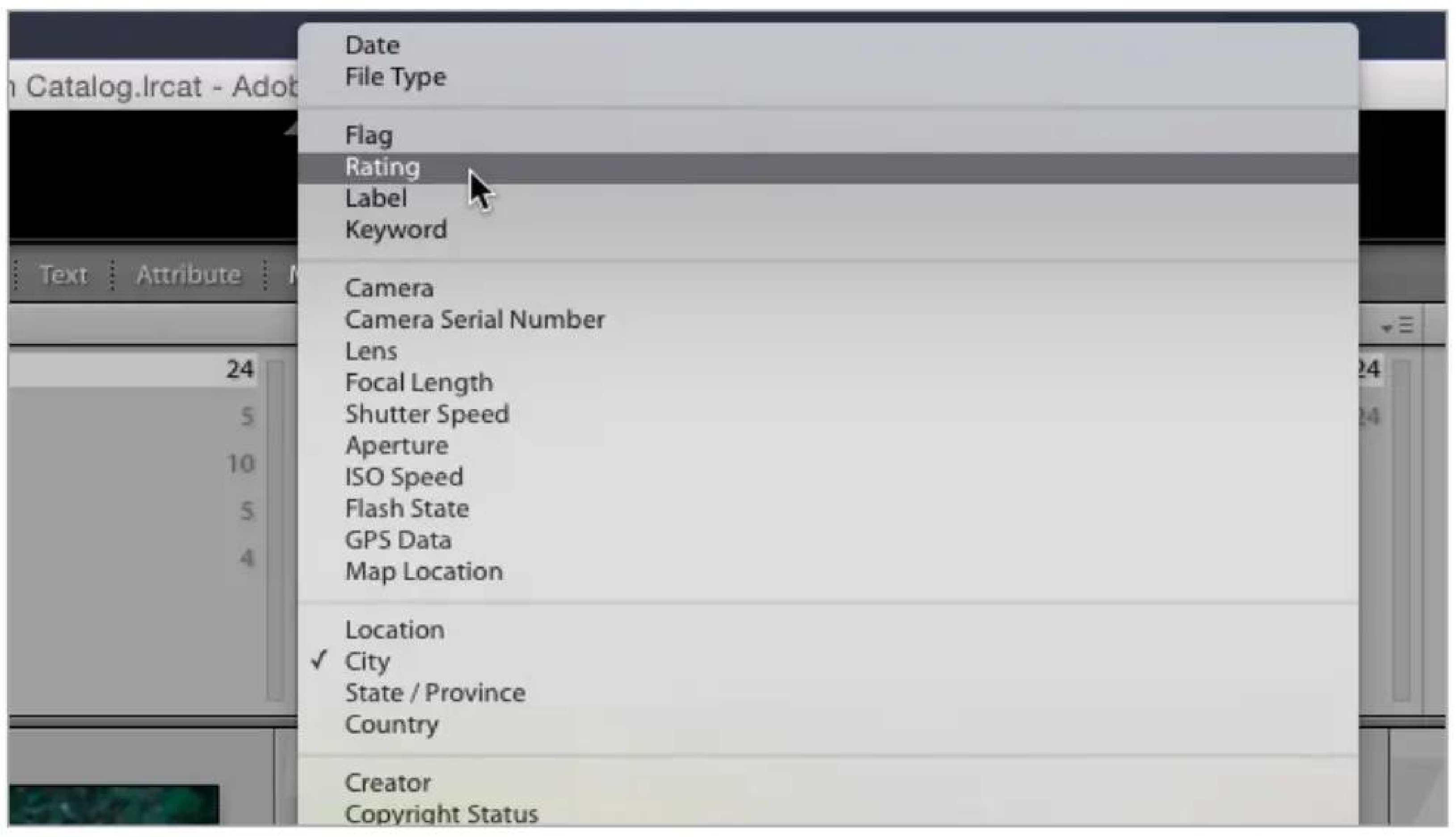
6 You can use the text search filters to find more than just keywords. You can also search for specific words in image metadata, for example a camera brand name or model type. If you shoot particular types of photo with a particular camera this can help to narrow down your search to just photos taken with that camera.


Library | Develop | Map | Boo

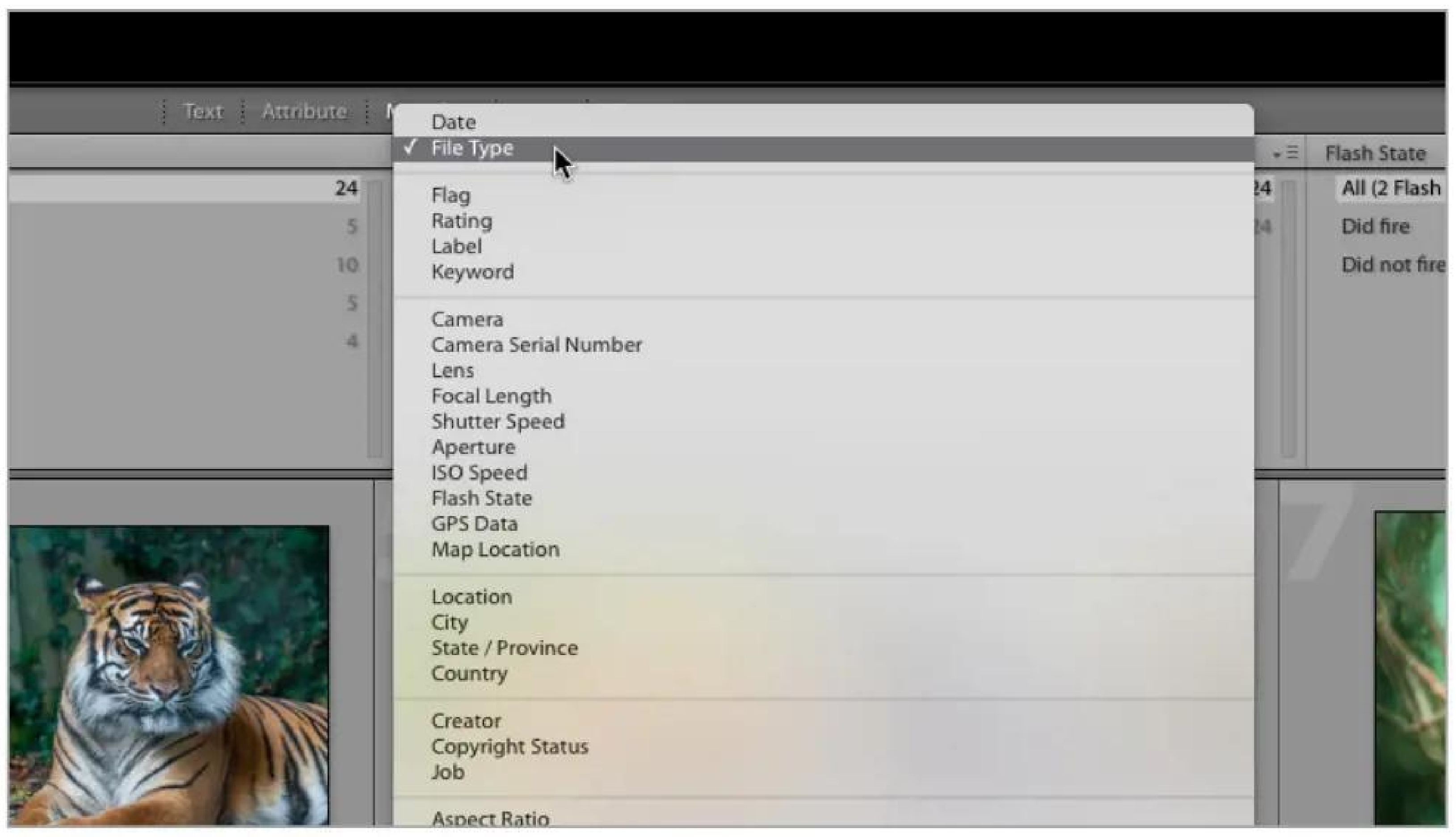
7 You looked at metadata in a previous section and you can also use metadata to filter your searches. Since the metadata of a digital photograph contains information on the time the photo was taken and the type of camera used to take it, you can quickly filter search for just photos taken with a specific camera and lens on a particular date.


Library | D
Flag
Rating
Label
Keyword
Camera
Camera Serial Number
Lens
✓ Focal Length
Shutter Speed
Aperture
ISO Speed
Flash State
GPS Data
Map Location
Location
City
State / Province
Country
Creator
Copyright Status
Job
Aspect Ratio
Smart Preview Status
Snapshot Status
Treatment
Develop Preset
Metadata Status
None
Flash State
All (2 Flash States)
Did fire
Did not fire

8 You can customise the metadata filters to help you search under a number of different parameters. If you regularly shoot with a GPS-enabled camera, one very handy search parameter is the location data. Click on the top bar of a search filter column and select from Location, City, State/Province or Location to see a list of the available data.


Catalog.lrcat - Adob
Text
Attribute
Date
File Type
Flag
Rating
Label
Keyword
Camera
Camera Serial Number
Lens
Focal Length
Shutter Speed
Aperture
ISO Speed
Flash State
GPS Data
Map Location
Location
✓ City
State / Province
Country
Creator
Copyright Status

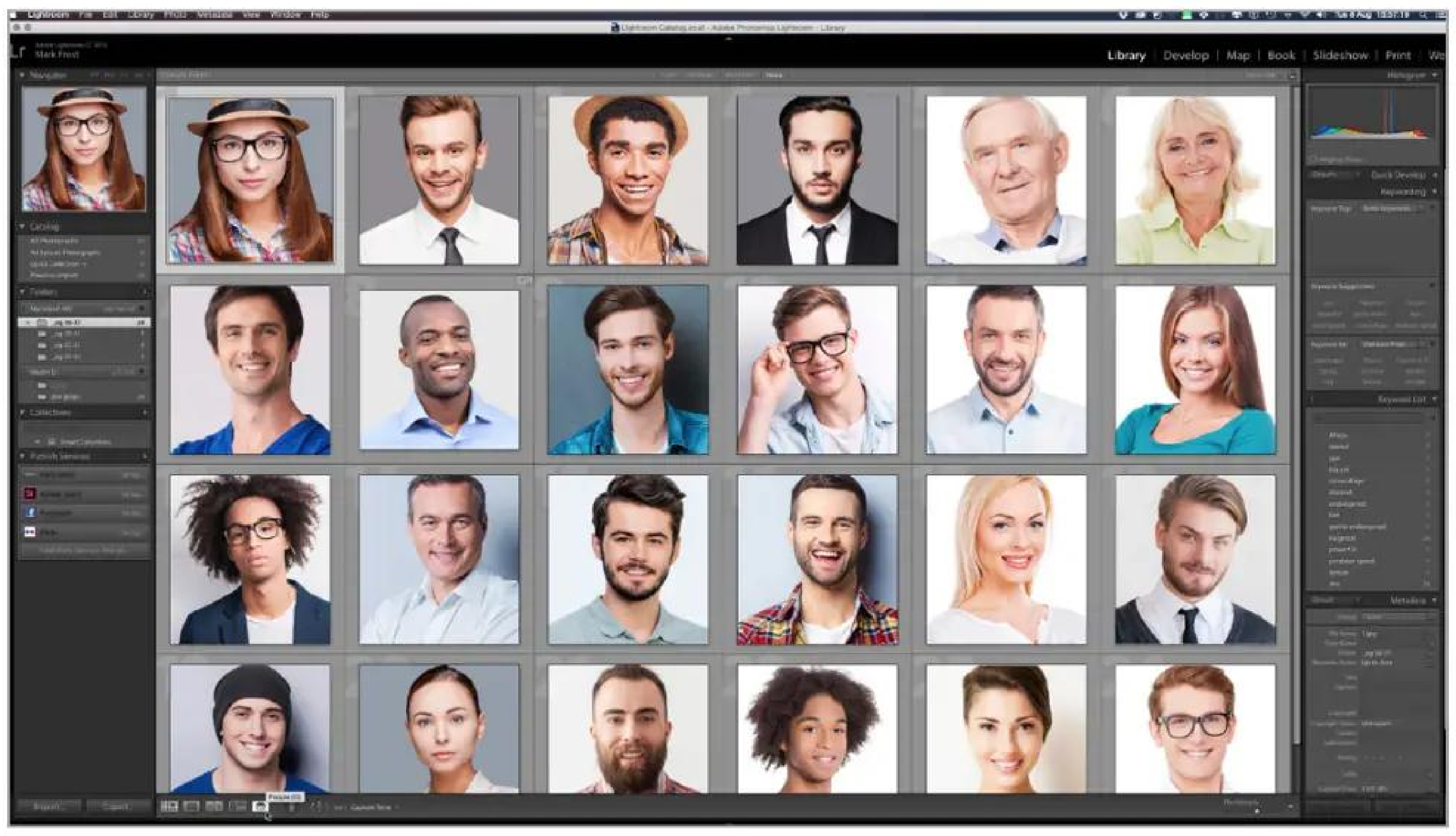
9 Another use for the metadata filter is to search for photos that you've flagged or given a particular star rating. Again, you can choose an option from the drop-down menu by clicking on the top bar of any of the metadata filter columns. The columns will show you the number of photos in your library to which each filter applies.


Text
Attribute
Date
✓ File Type
Flag
Rating
Label
Keyword
Camera
Camera Serial Number
Lens
Focal Length
Shutter Speed
Aperture
ISO Speed
Flash State
GPS Data
Map Location
Location
City
State / Province
Country
Creator
Copyright Status
Job
Aspect Ratio
Flash State
All (2 Flash
Did fire
Did not fire

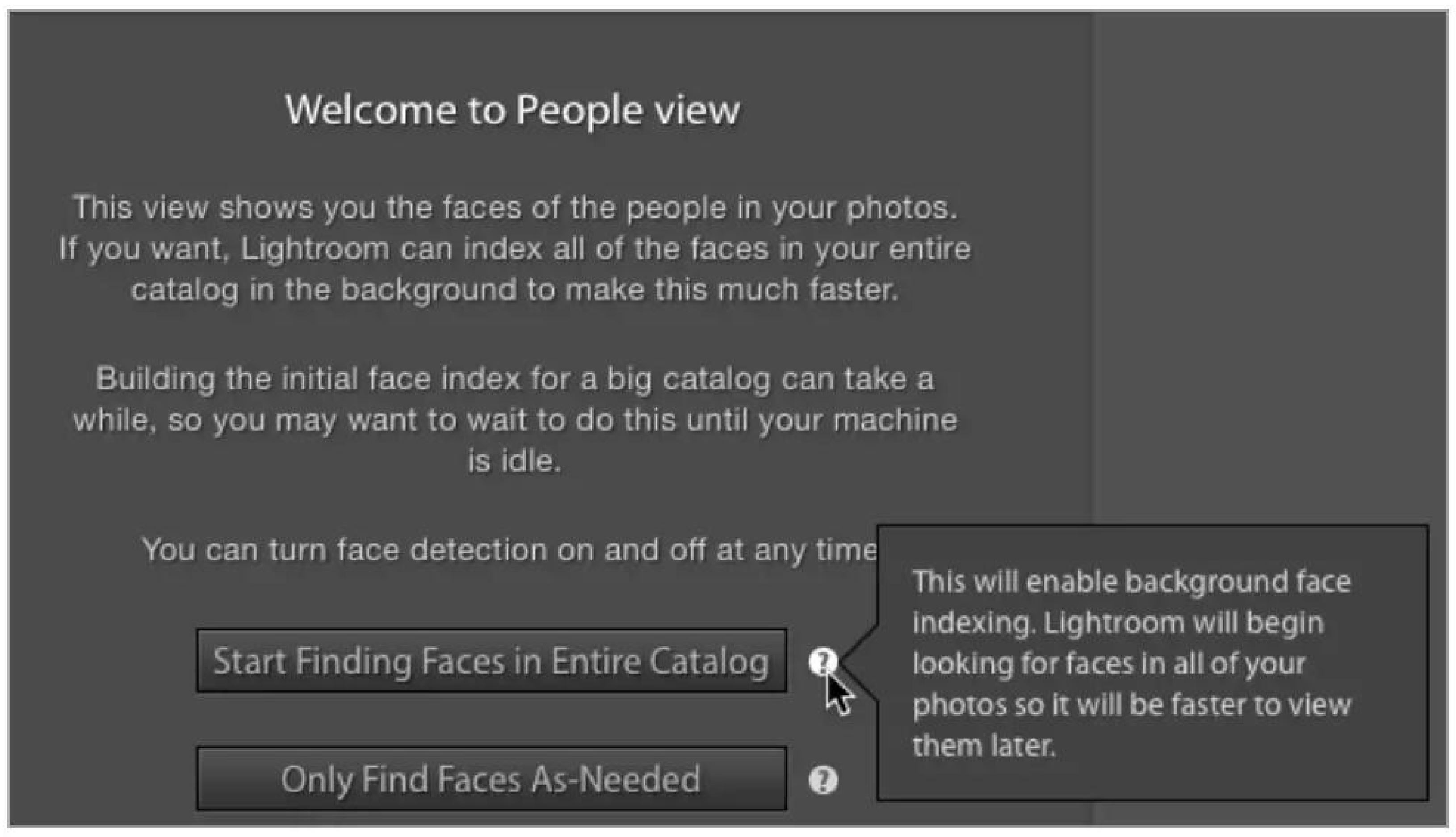
10 You can also search by file type, such as JPEG, DNG, Photoshop PSD file, TIFF, Raw files from various camera types, PNG graphics files or video files of any type. If, as we've suggested, you always shoot in Raw mode this might not be too helpful but if you have a lot of mixed media in your collection it can help to locate specific types of file.

Using Face Recognition

Lightroom incorporates advanced facial recognition technology to help put names to the faces in your photos. It's remarkably effective at recognising the same face, even under unusual conditions, but it does need a bit of help.


Library | Develop | Map | Book | Slideshow | Print | Web

1 To get started with the facial recognition system, go to the Library Grid view. On the bar at the bottom of the view window you'll see the row of viewing option buttons that we discussed earlier, and next to them a button with a face on it. This is the People button; click on it or alternatively use the hotkey shortcut O.



Welcome to People view

This view shows you the faces of the people in your photos. If you want, Lightroom can index all of the faces in your entire catalog in the background to make this much faster.

Building the initial face index for a big catalog can take a while, so you may want to wait to do this until your machine is idle.

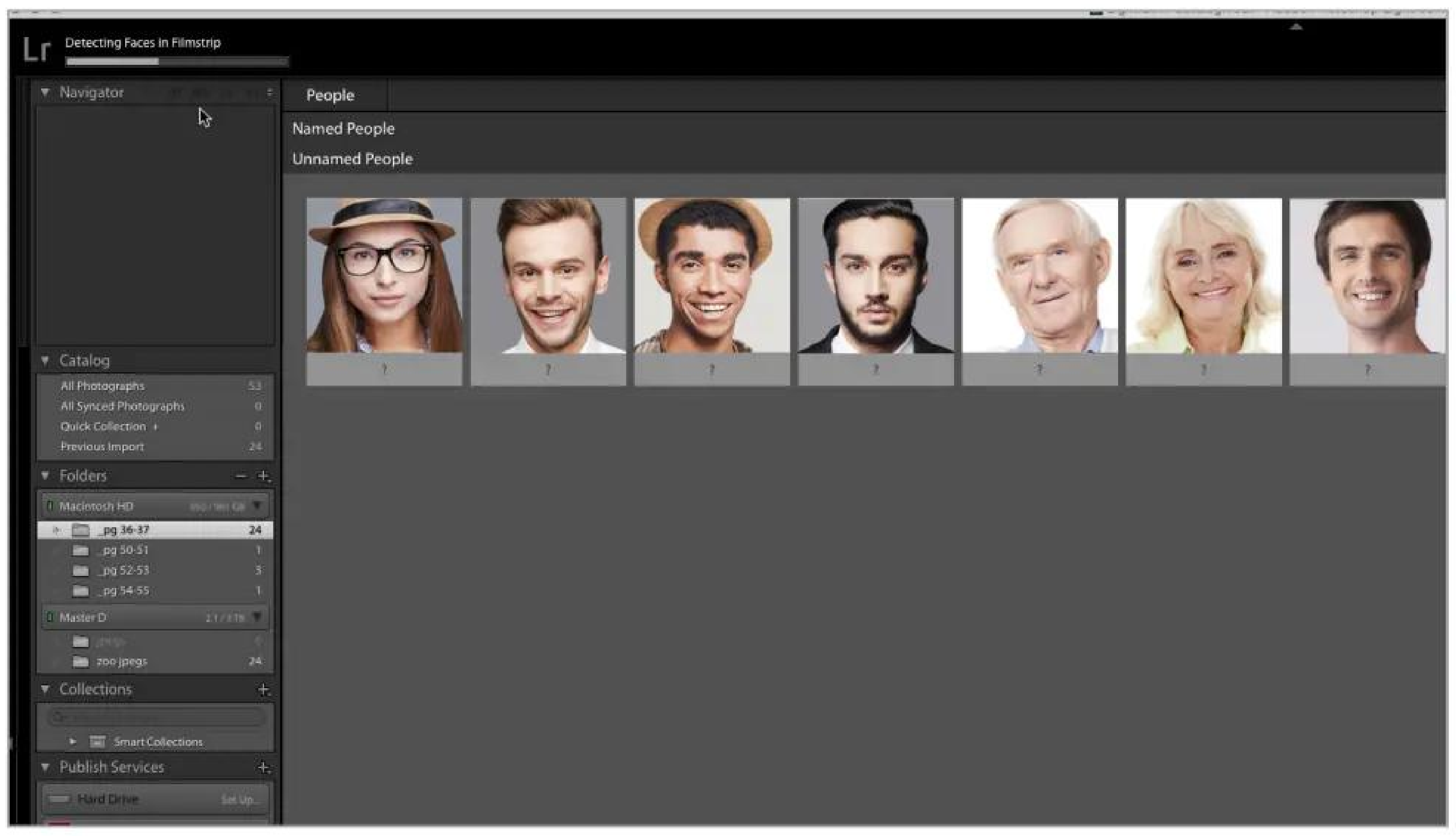
You can turn face detection on and off at any time

Start Finding Faces in Entire Catalog

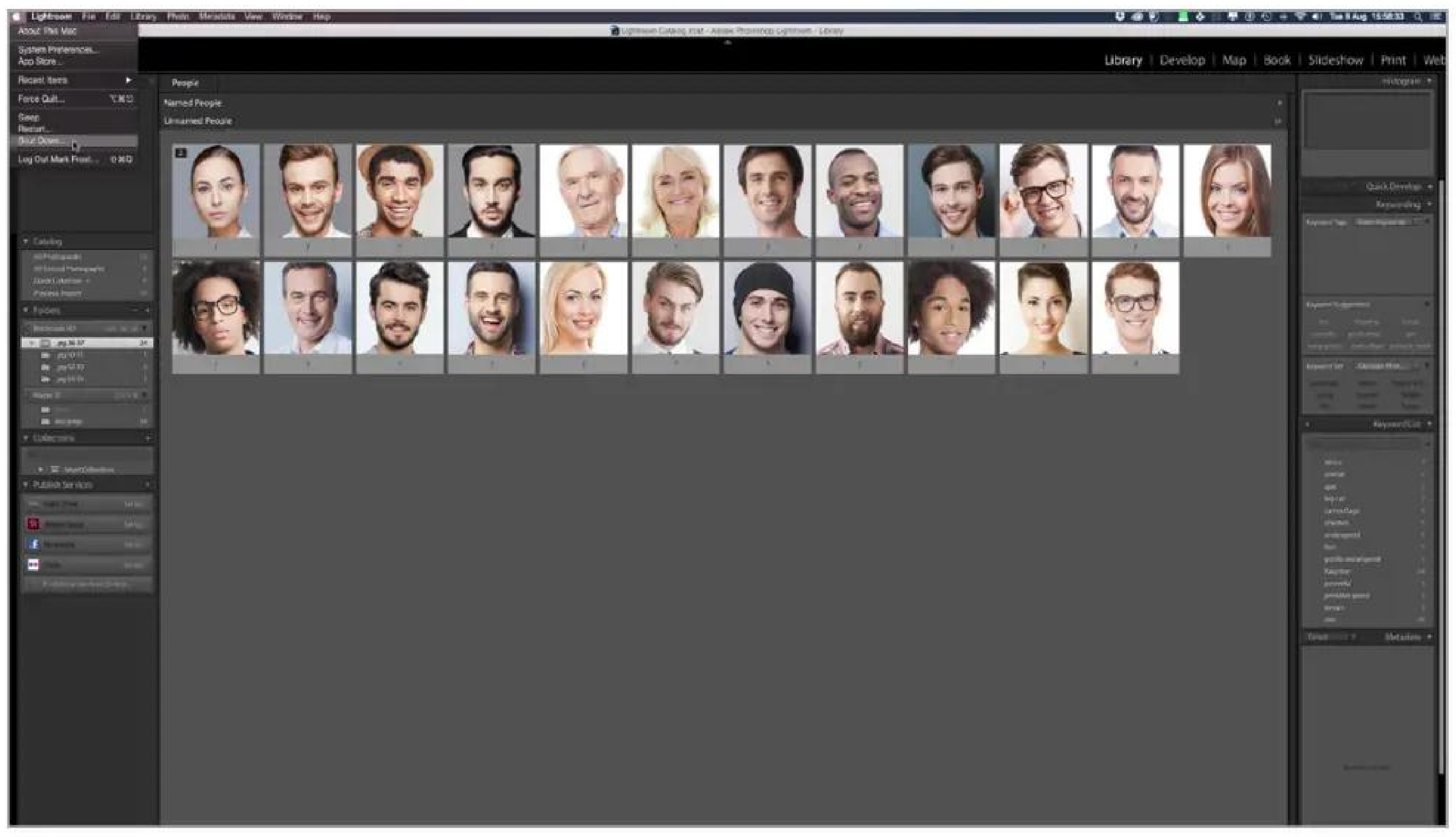
Only Find Faces As-Needed

This will enable background face indexing. Lightroom will begin looking for faces in all of your photos so it will be faster to view them later.

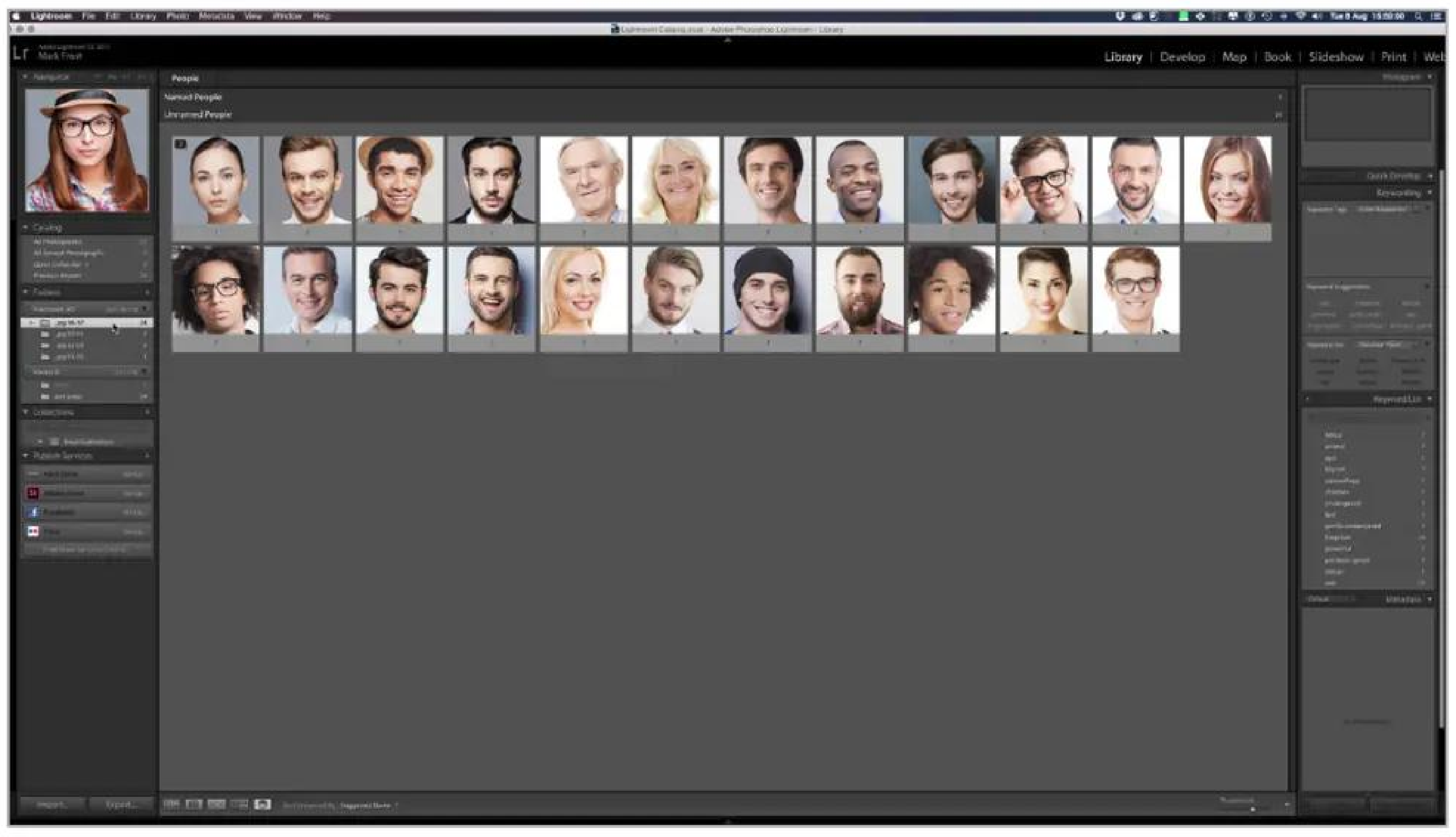
2 If this is your first time using the facial recognition system, you'll see an introduction screen with two options. You can choose either to fun face recognition on your entire catalogue of images or to just use it as needed. The first option will produce more useful results in the long run but the second is more convenient for a single image.


Detecting Faces in Filmstrip
Navigator
People
Named People
Unnamed People
Catalog
All Photographs
All Synced Photographs
Quick Collection +
Previous Import
Folders
Macintosh HD
Collections
Smart Collections
Publish Services
Hard Drive

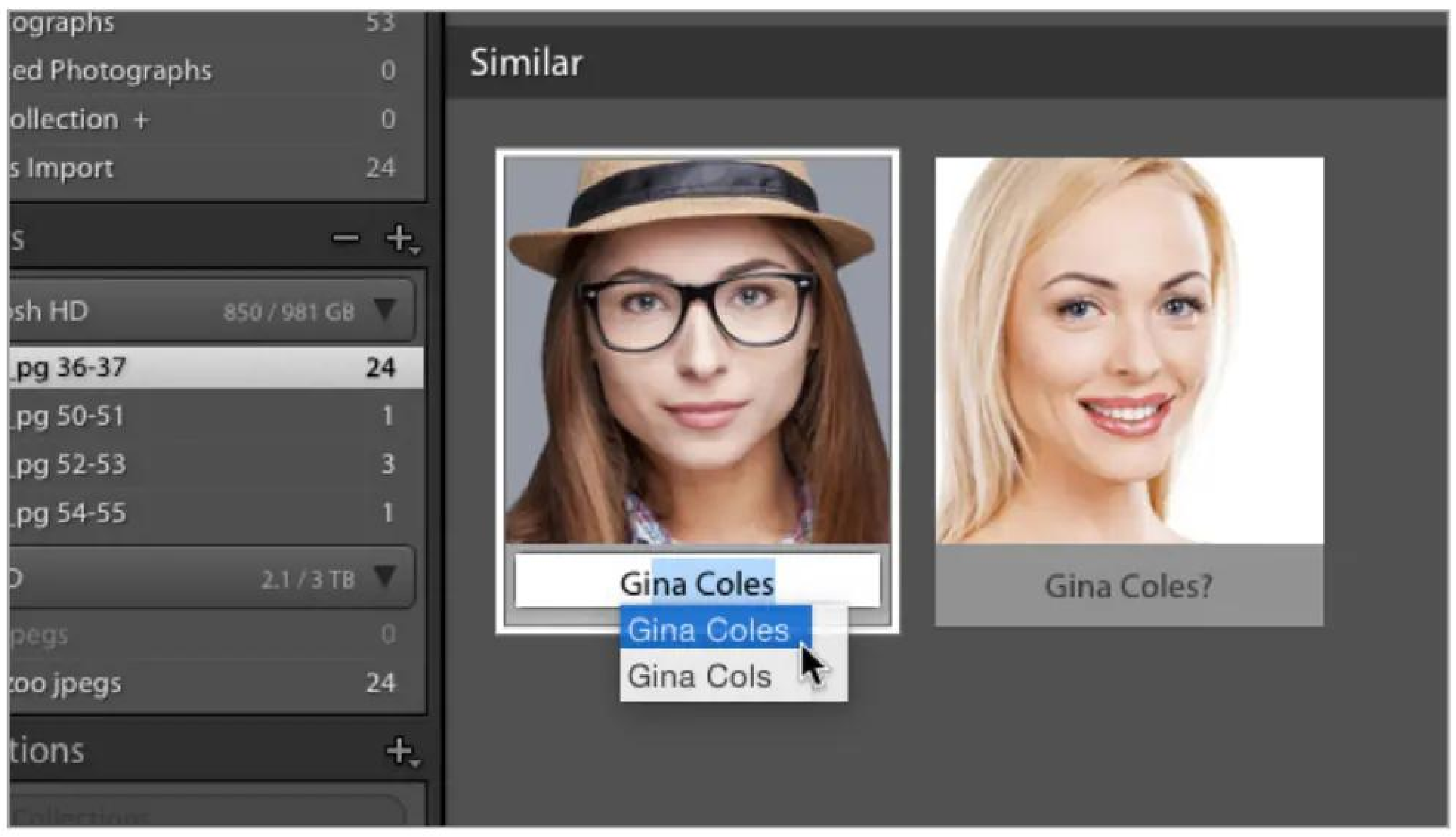
3 Click on the 'Start finding faces…' button and the program will start going through your image library looking for faces. If you have a collection of thousands of images with many of them containing people, this process may take a long time. For example, a collection of more than 50,000 images could take around 24 hours.


People
Named People
Unnamed People

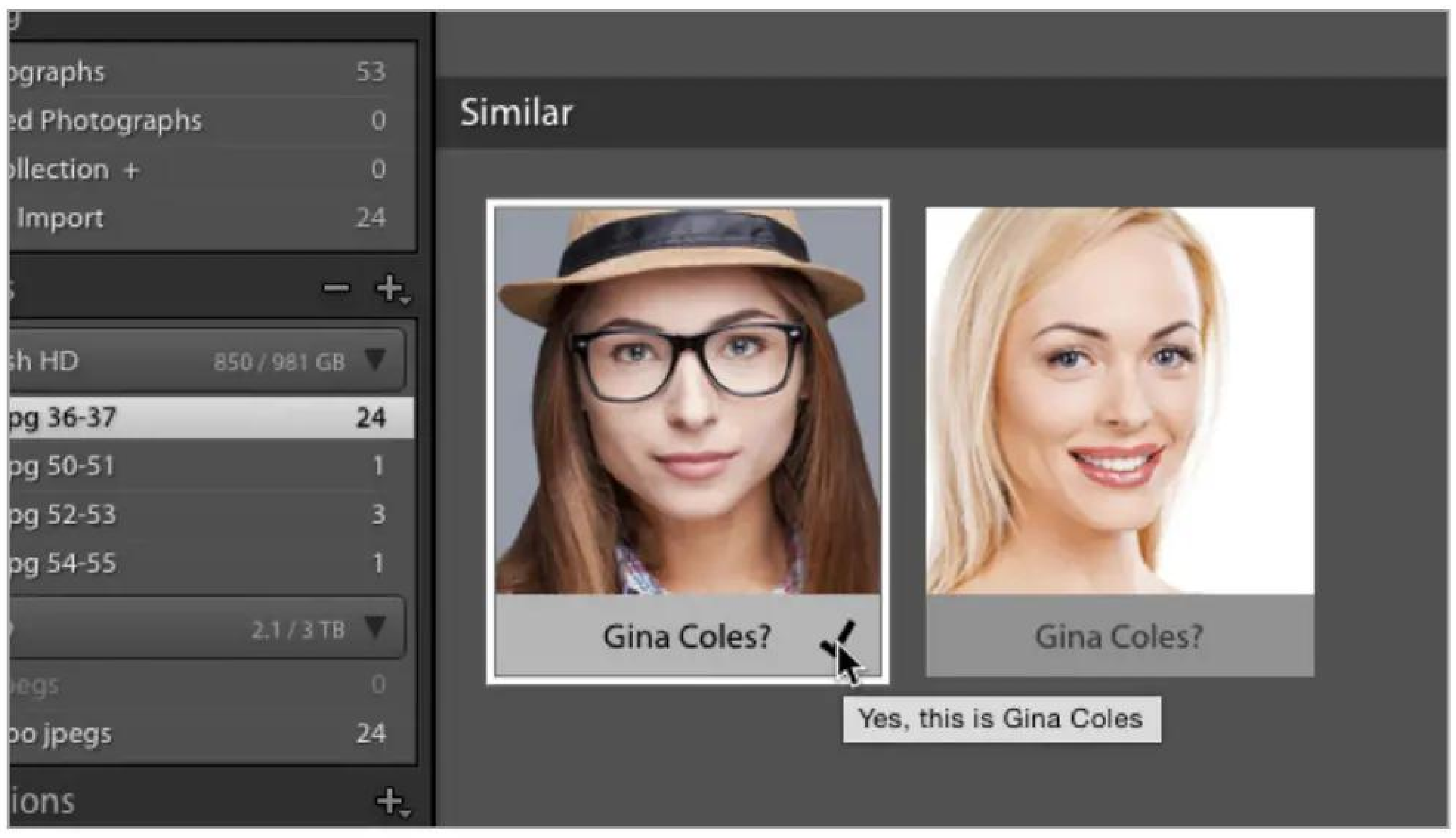
4 If you are able to leave your PC switched on overnight, you can leave the search running and it should be complete by the morning. If not, don't worry. You can close the program and switch off your PC safely. The search will resume the next time you start Lightroom and will carry on running in the background as it is not too processor intensive.



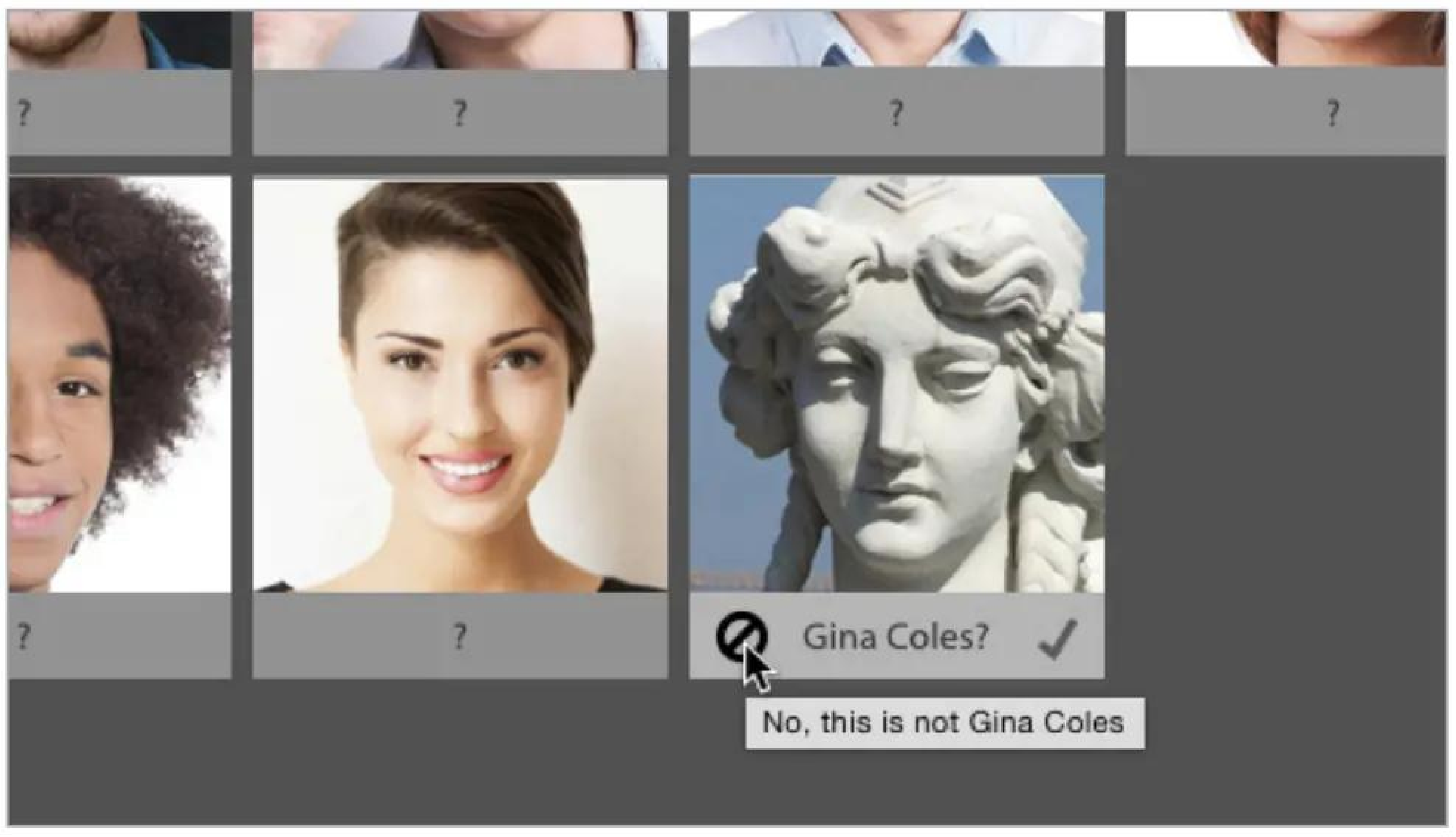
5 By default, the system will start searching through and indexing your entire picture library but you can set it to just look in one particular folder. While the search is running, go to the Folders tab and select the folder that you want to search. The system will immediately begin indexing that folder and any sub-folders that it contains.


ographs 53
ed Photographs 0
ollection + 0
s Import 24
sh HD 850 / 981 GB
pg 36-37 24
pg 50-51 1
pg 52-53 3
pg 54-55 1
2.1 / 3 TB
pegs 0
oo jpegs 24
tions
Similar
Gina Coles
Gina Coles
Gina Cols
Gina Coles?

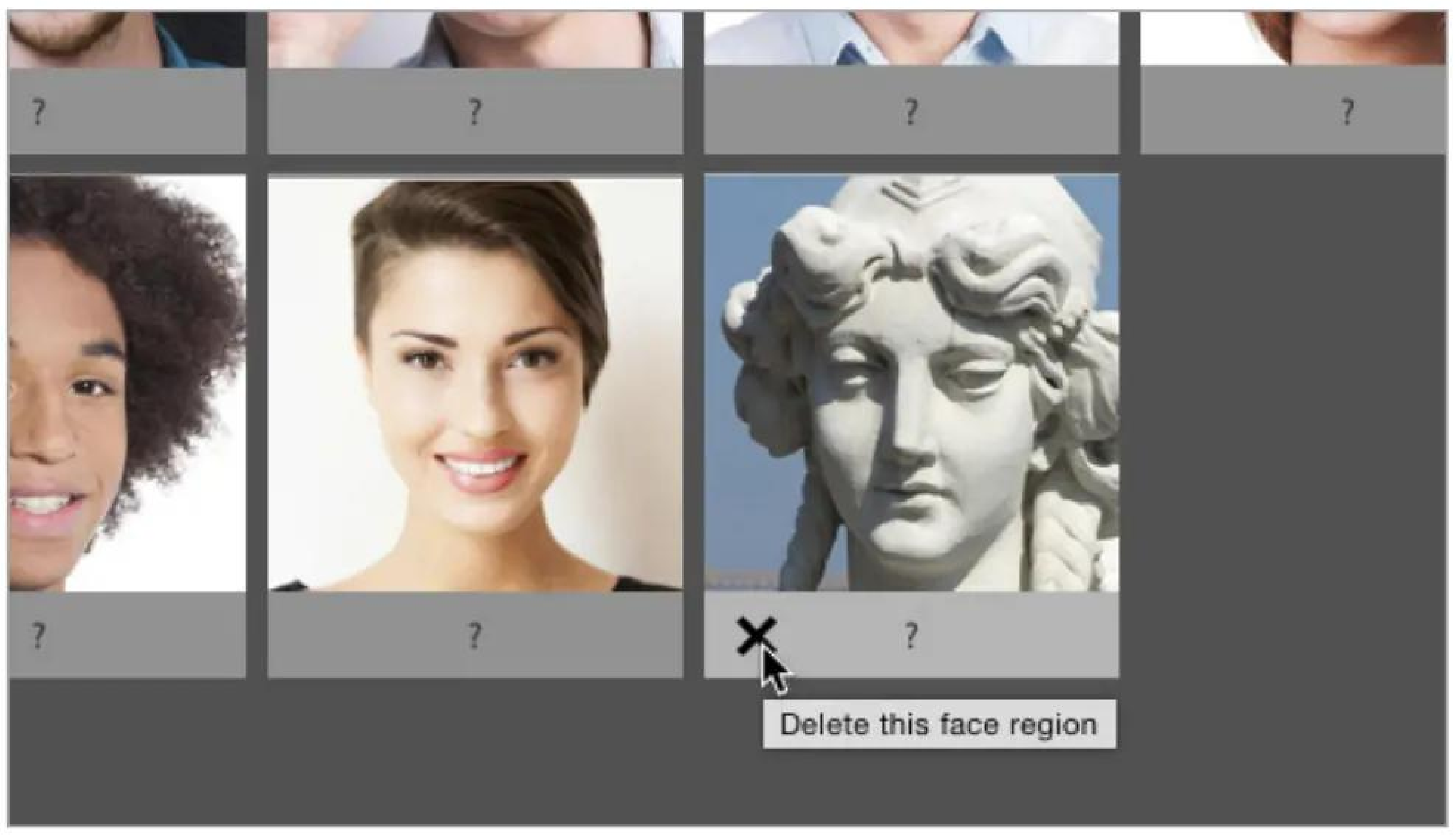
6 As the system starts finding faces, you can start adding names to them. At first, obviously, it won't recognise anyone and the faces will just have question marks under them. Click on the question mark to add a name to the face and the system will then start suggesting similar faces to the ones that you've identified.


ographs 53
ed Photographs 0
ollection + 0
Import 24
sh HD 850 / 981 GB
pg 36-37 24
pg 50-51 1
pg 52-53 3
pg 54-55 1
2.1 / 3 TB
egs 0
oo jpegs 24
ions
Similar
Gina Coles?
Gina Coles?
Yes, this is Gina Coles

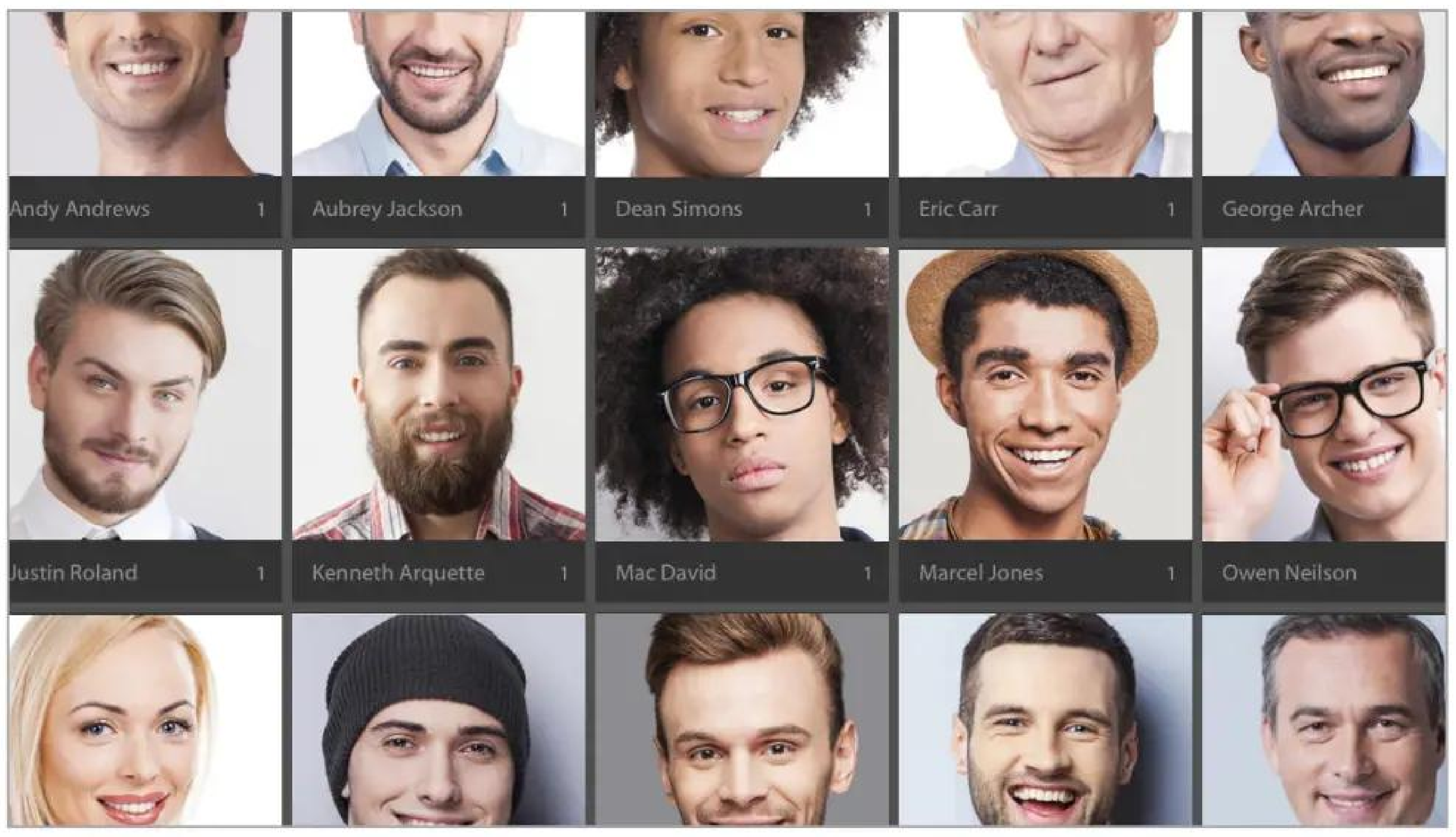
7 Once you've added a few names and the system starts making identifications, you can confirm the correct ones by clicking on the Tick button under the thumbnail. The more correct identifications that you confirm, the more accurate the face detection algorithm will become. You'll be surprised by just how accurate it can be.


?
?
?
?
?
?
Gina Coles?
No, this is not Gina Coles

8 Similarly, if the system makes an incorrect identification, click on the button on the right below the thumbnail to let it know that this is not the person it thought it had recognised. The suggested name will revert to a question mark, so if it is someone you recognise you can click on that and enter the correct name instead.


?
?
?
?
?
?
?
Delete this face region

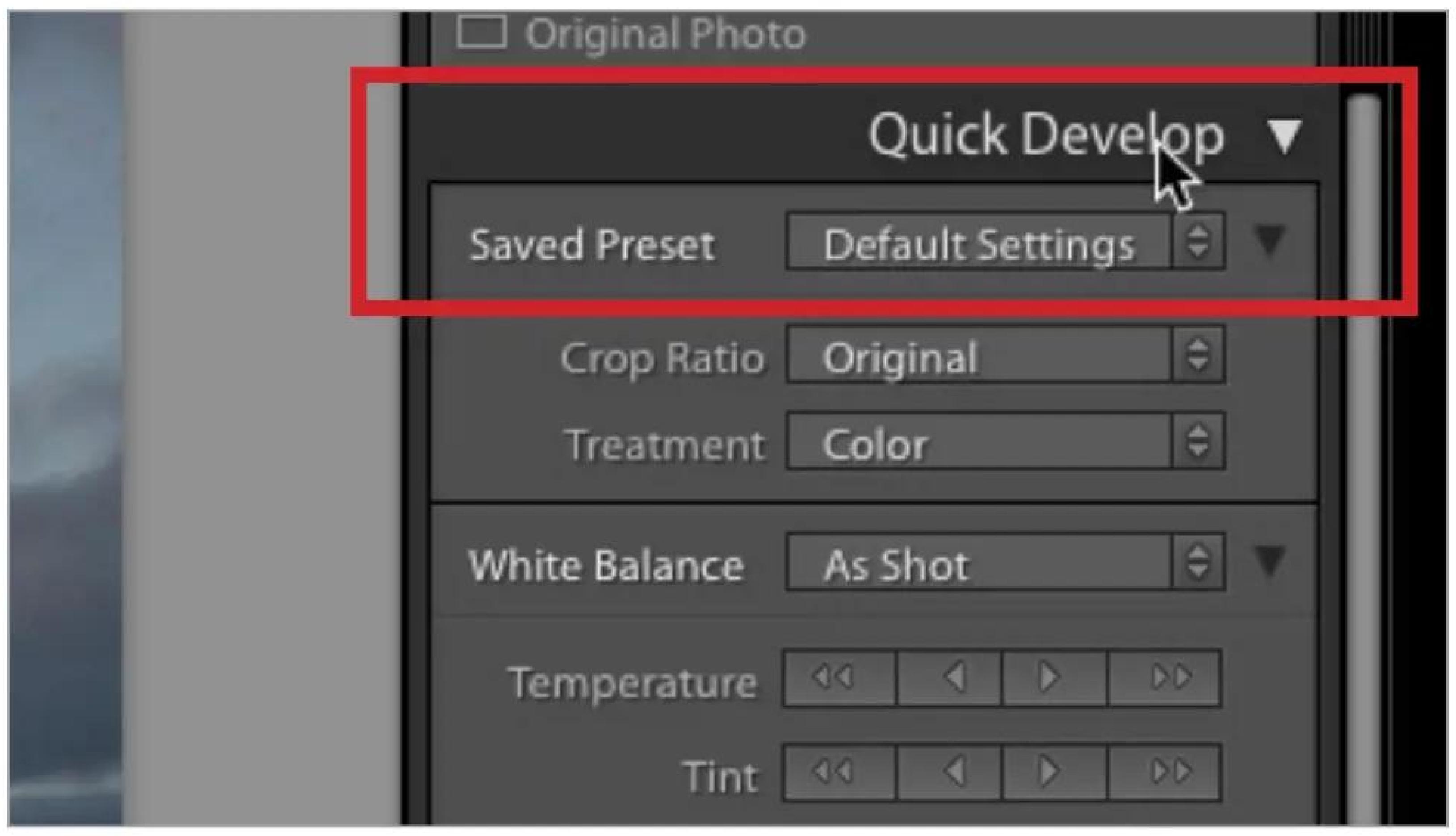
9 Although the face recognition algorithm is extremely good, it's really only identifying patterns of pixels that look like a face, so it will sometimes make mistakes. Statues, posters and cats (although not dogs, strangely) will confuse it, as will other face-like shapes. You can remove these by clicking again on the right-hand button.


Andy Andrews 1
Aubrey Jackson 1
Dean Simons 1
Eric Carr 1
George Archer
Justin Roland 1
Kenneth Arquette 1
Mac David 1
Marcel Jones 1
Owen Neilson

10 You'll be amazed at how successful the face recognition can be. It can easily recognise photos of people taken thirty years apart and has no problem with sunglasses, fancy dress costumes and people pulling silly faces. The mistakes can be quite amusing too, a depiction of Satan on a poster mistaken for a former boss, for example!

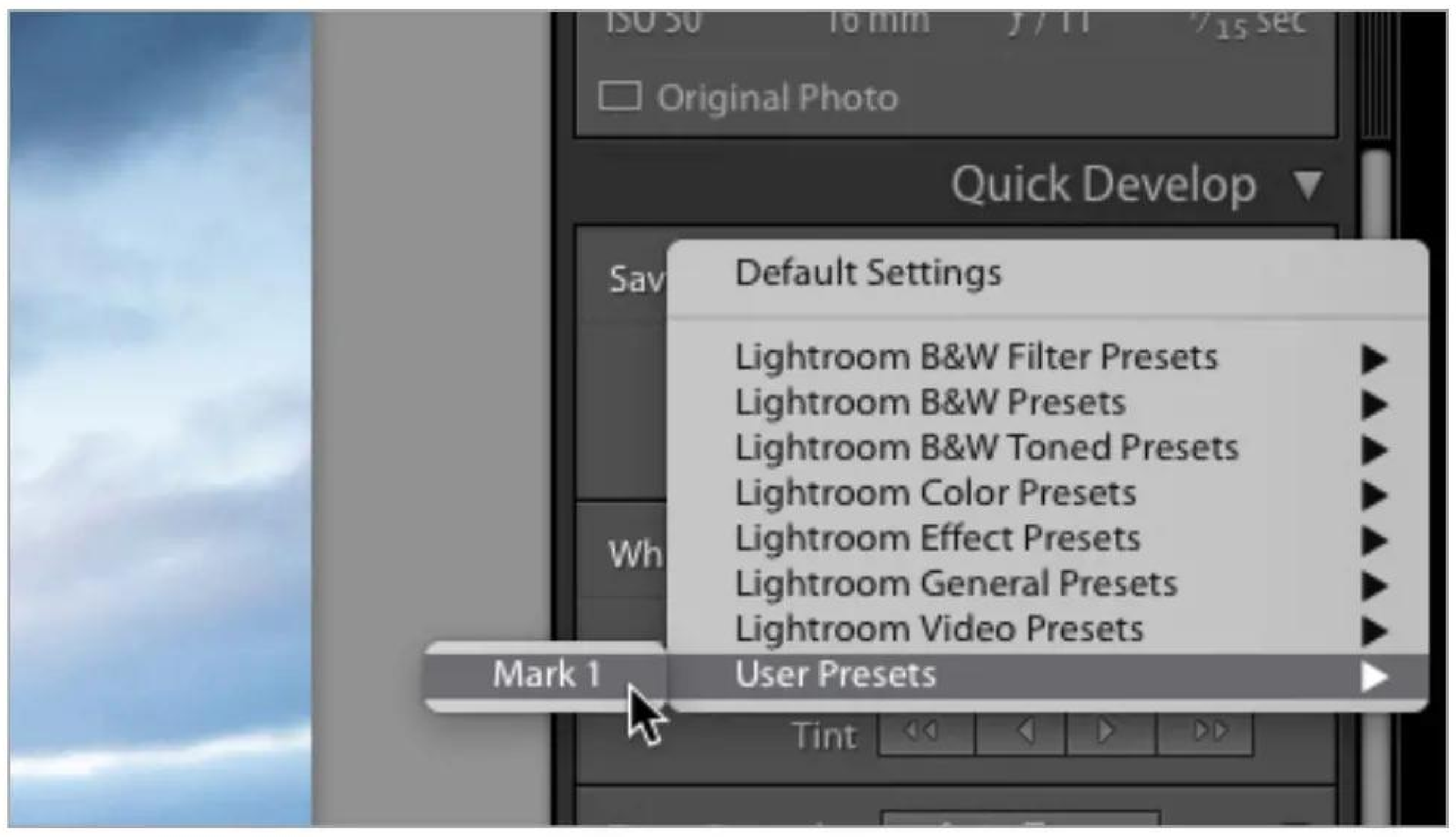
Fix Photos with Quick Develop

Lightroom offers two ways to get the best out of your images. We'll take a closer look at the power of the Develop module in the next section but the Library module Quick Develop tab features a range of tools that can apply quick fixes to improve your photos.

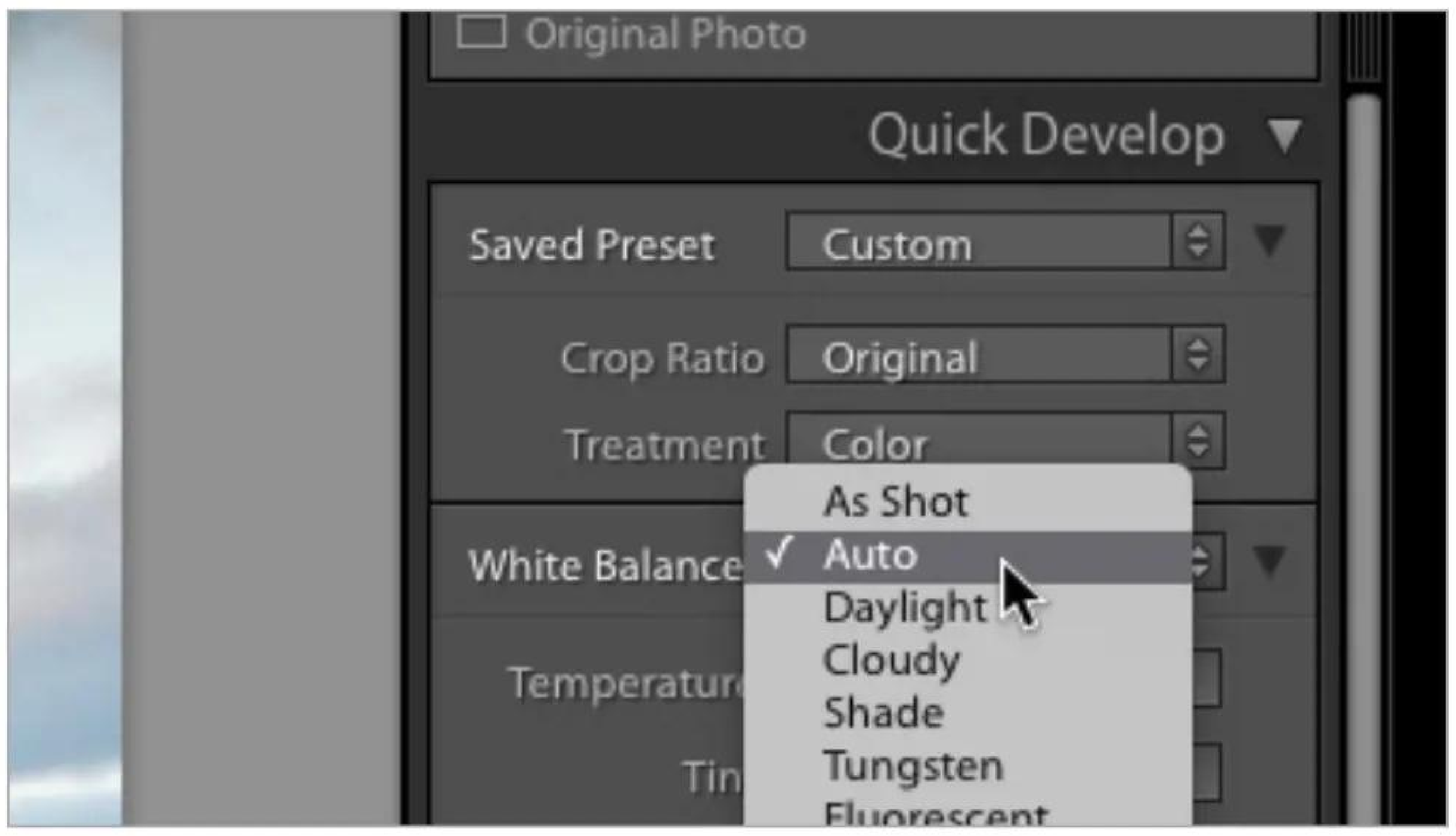

Original Photo
Quick Develop
Temperature
Tint

Saved Preset: Default Settings
Crop Ratio: Original
Treatment: Color
White Balance: As Shot

① You can find the Quick Develop tab in the right-hand sidebar of the Library module. To get the best use out of it, it's a good idea to make sure you have the Histogram tab open at the same time, to help get the exposure right, and use the Loupe view in zoomed-out mode so you can see the whole picture much more clearly.

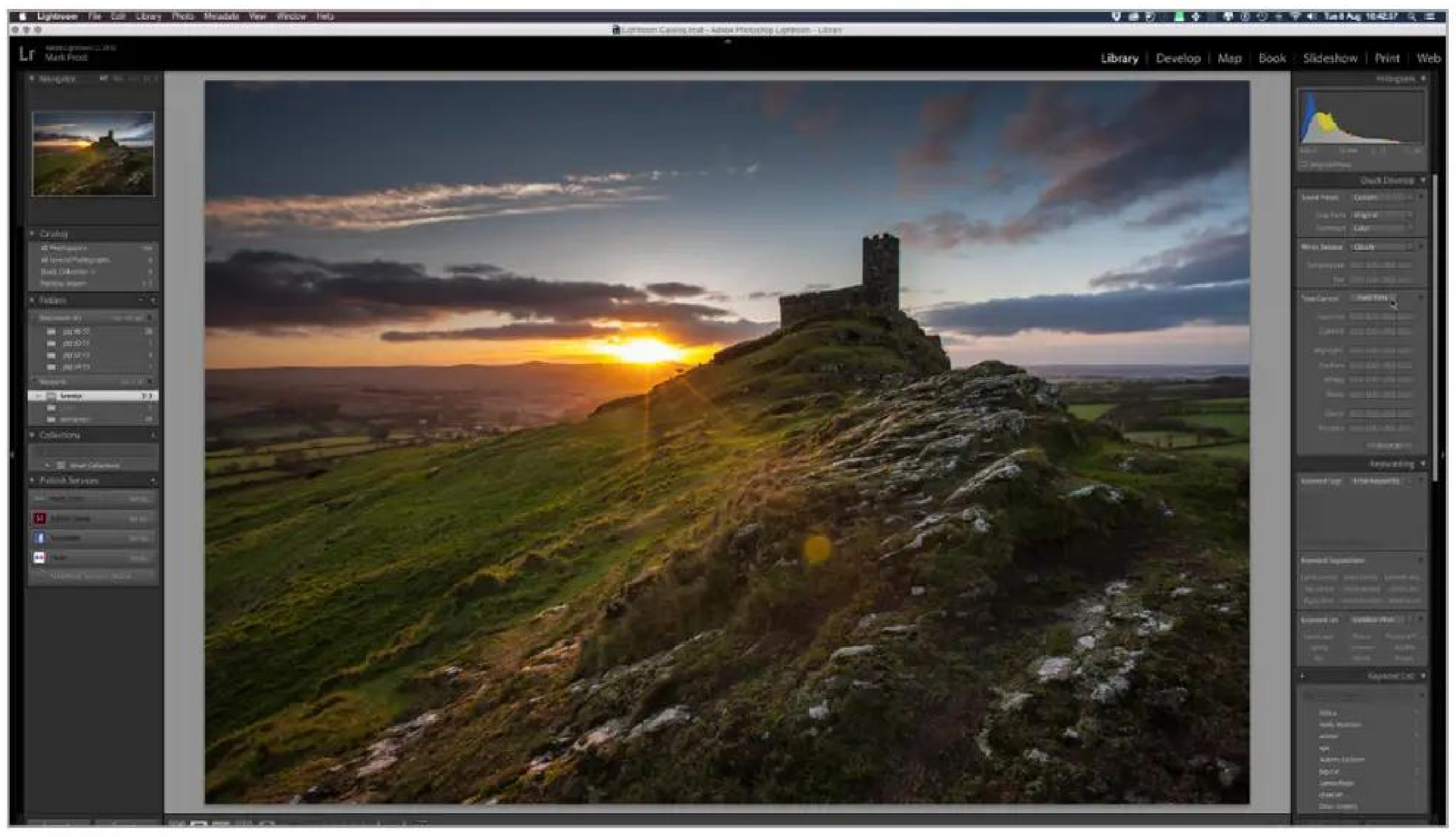

ISO 50
16 mm
ƒ/11
1/15 sec
Original Photo
Quick Develop
Default Settings
Lightroom B&W Filter Presets
Lightroom B&W Presets
Lightroom B&W Toned Presets
Lightroom Color Presets
Lightroom Effect Presets
Lightroom General Presets
Lightroom Video Presets
User Presets
Mark 1
Tint

② At the top of the Quick Develop panel you'll see a drop-down menu offering a wide range of preset developing settings. These are great for experimenting with different looks and styles and include a range of monochrome filter and toning effects, various colour processing styles, sharpening, contrast enhancement and more. There are also video effects available.

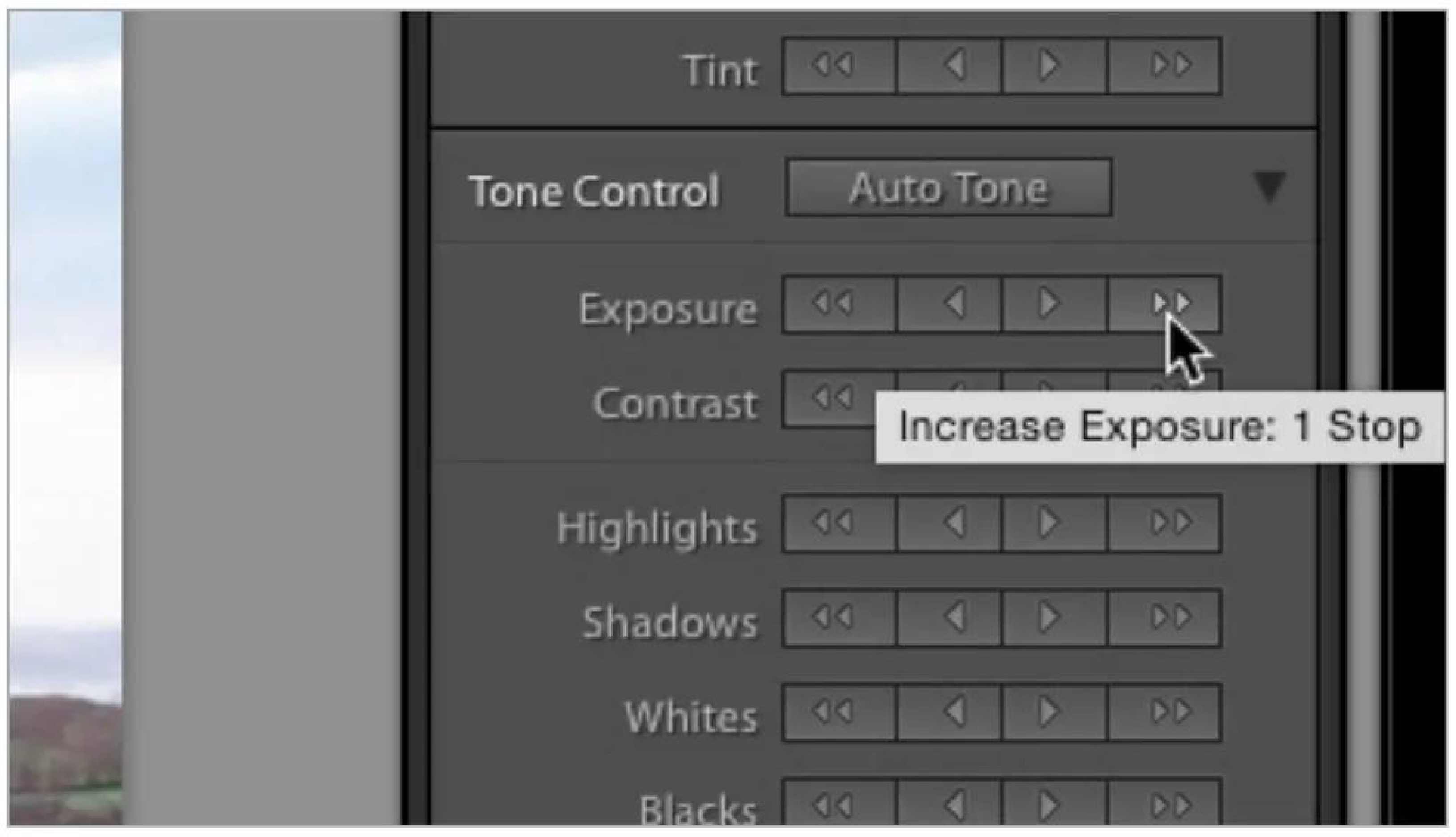

Original Photo
Quick Develop
As Shot
✓ Auto
Daylight
Cloudy
Shade
Tungsten
Fluorescent
Temperature
Tint

Saved Preset: Custom
Crop Ratio: Original
Treatment: Color
White Balance: Auto

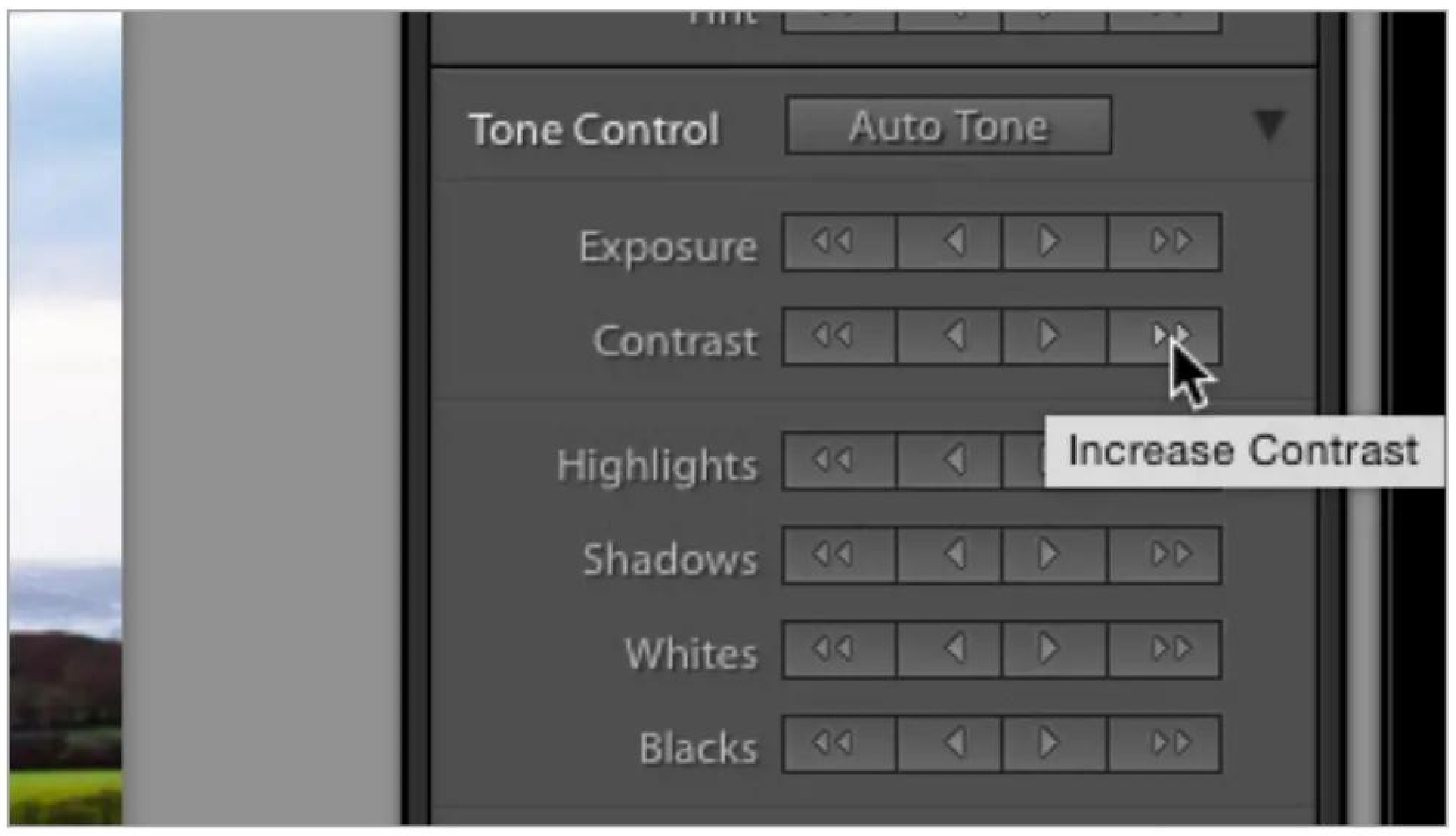
③ The next feature is the white balance control. This lets you change the white balance from the setting used on the camera when you took the photo. It works best if you're editing a Raw file, since it can correct the white balance without losing quality. If you're not sure what the correct white balance should be, use the Auto option.



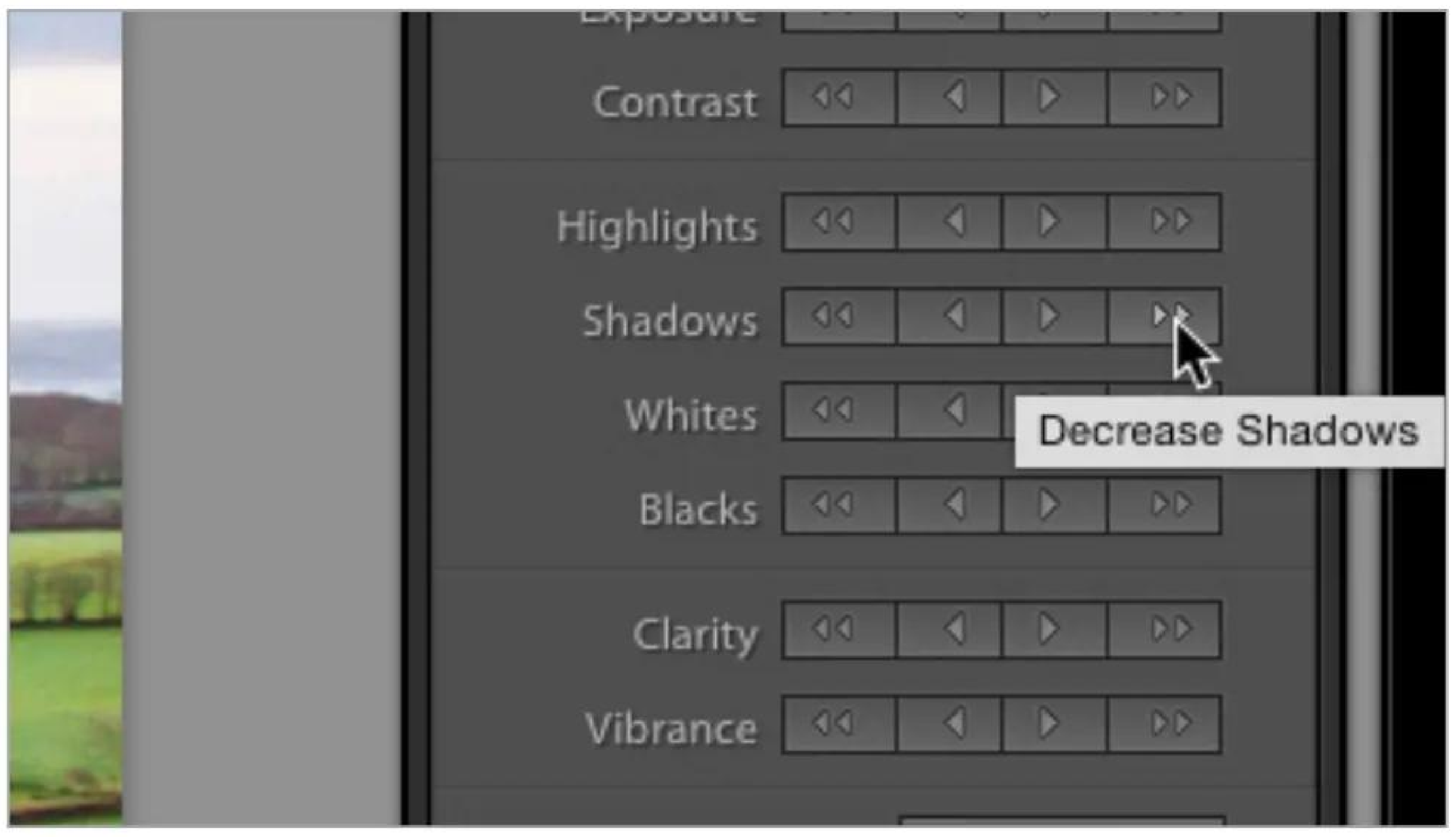
④ The Auto Tone button is something of a last-resort option. It will attempt to optimise the exposure, contrast and tone settings to produce a good result but it will only ever be an average approximation. All photos vary in their requirements, so it's best to avoid it and adjust tone and exposure manually, keeping an eye on the histogram.


Tint
Tone Control
Auto Tone
Exposure
Contrast
Increase Exposure: 1 Stop
Highlights
Shadows
Whites
Blacks

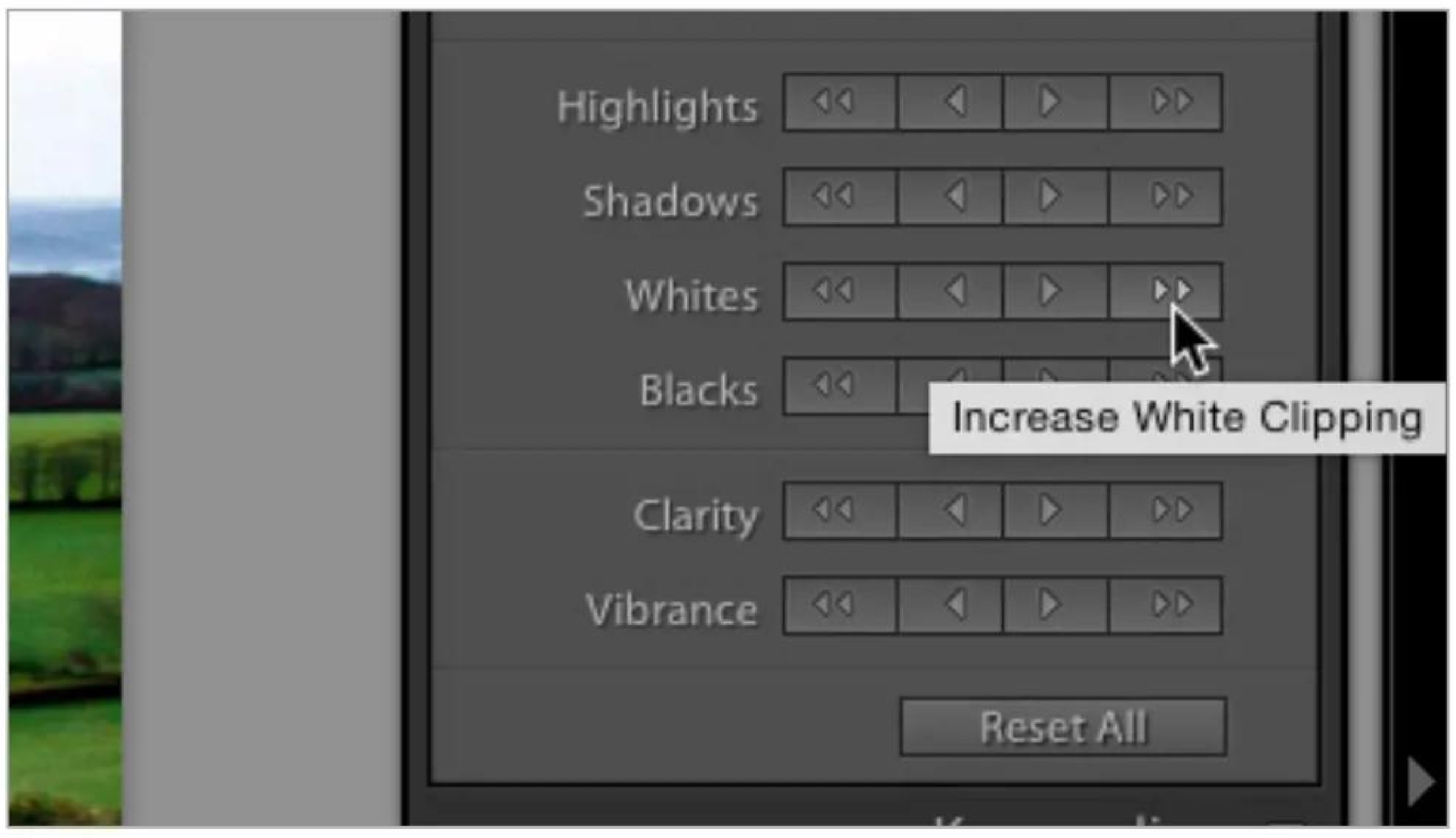
5 The Exposure adjustment control has four buttons. The ones with the single chevron adjust the exposure up or down by one third of a stop, while the buttons with two chevrons adjust it by a full stop. Unless your image is dramatically under or over-exposed it's best to use the 1/3rd-stop buttons, keeping an eye on the histogram and the Loupe view.


Tone Control
Auto Tone
Exposure
Contrast
Increase Contrast
Highlights
Shadows
Whites
Blacks

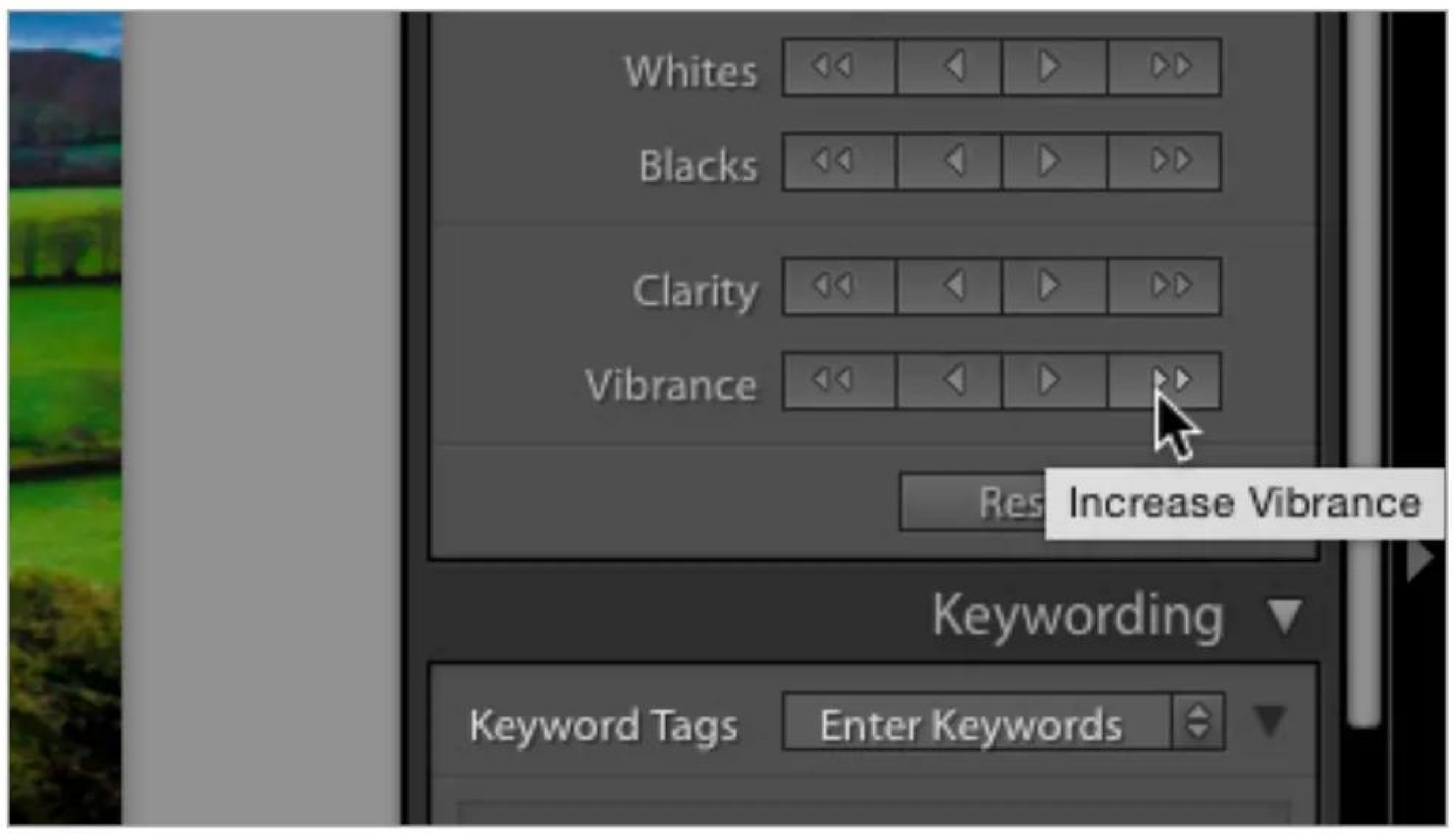
6 Contrast is a harder thing to quantify than exposure but generally it makes the light tones lighter and the dark tones darker. Again, the singe chevron buttons make a slight adjustment, while the double chevron buttons make a larger adjustment. Most correctly exposed images won't need much adjustment, so use it sparingly for best effect.


Contrast
Highlights
Shadows
Whites
Decrease Shadows
Blacks
Clarity
Vibrance

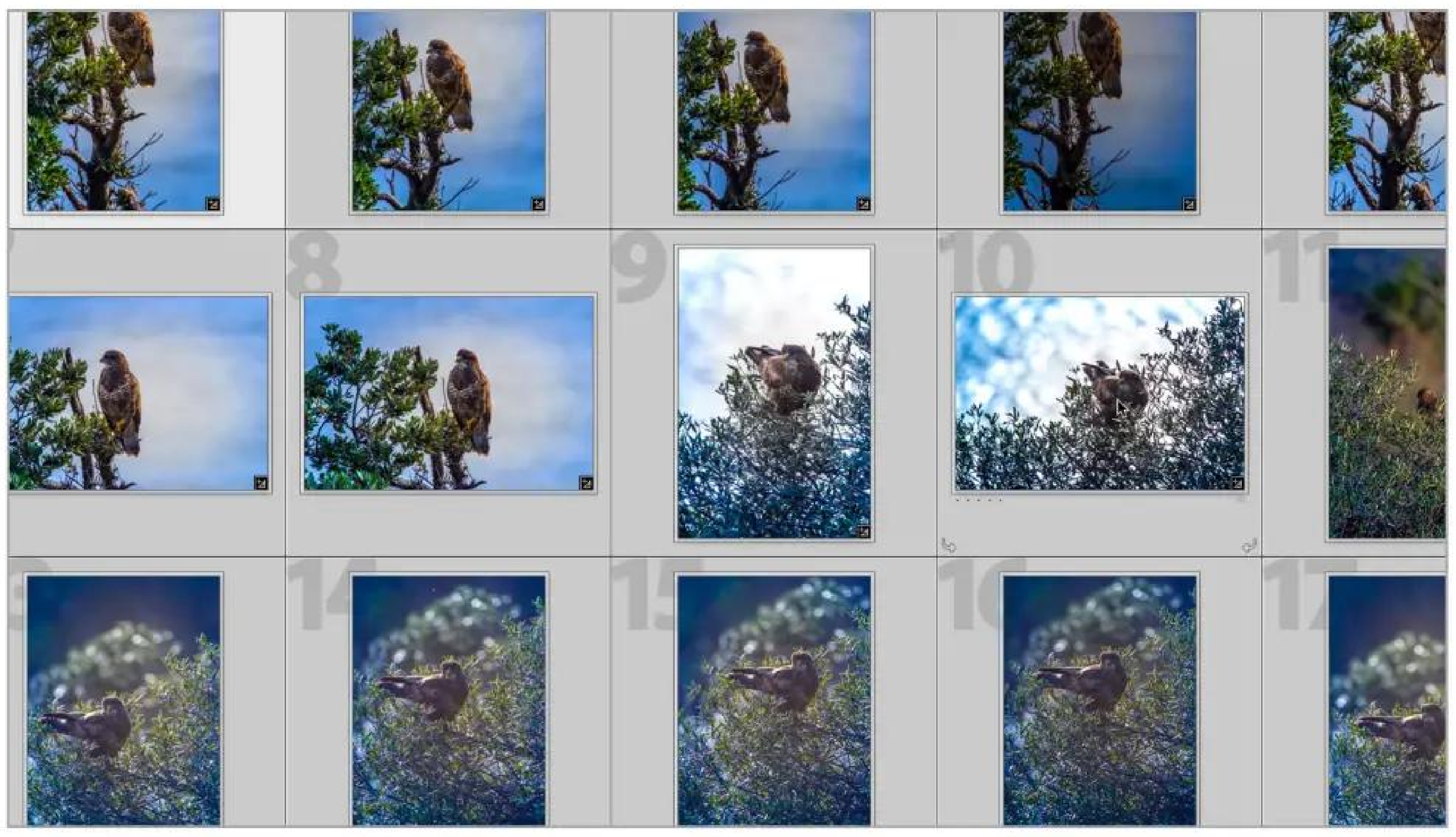
7 The Highlights and Shadows adjustments affect the higher and lower ends of the histogram respectively. They are used to improve detail in shadow and highlight areas and are particularly useful in difficult lighting conditions, such as heavily backlit scenes, where they can brighten up shadowed faces. They are best used in combination to avoid unbalancing the shot.


Highlights
Shadows
Whites
Blacks
Increase White Clipping
Clarity
Vibrance
Reset All

8 The Whites and Blacks adjustments are basically more extreme variations on the Highlights and Shadows adjustments. They are used to correct excessive clipping in deep shadows and bright highlights and take advantage of the expanded dynamic range available in Raw file images, as we discussed on page 15. Use in conjunction with the histogram for best results.


Whites
Blacks
Clarity
Vibrance
Increase Vibrance
Keywording
Keyword Tags
Enter Keywords

9 Clarity and Vibrance have replaced the old Saturation adjustment and offer much more precise control over tone. Basically, Clarity improves the contrast in the mid-tones of the image by sharpening the edge detail, while Vibrance increases the saturation of only the least saturated colours, so you can improve overall saturation without blowing out bright colours.



10 One advantage of using the Library module quick develop is that you can adjust a whole batch of photos at once. Simply select all the photos that you want to adjust and whatever adjustments are needed will be applied to all of them. This is particularly useful if you discover that you've used the wrong white balance setting on a whole shoot!

Monochrome Shots

Often, converting a colour photo to black and white can degrade the quality or lose some of the definition of the object being photographed. However, Lightroom has some excellent presets and tools available to help create the perfect monochrome portrait.

Portrait shots can look great in black and white and this simple fashion shot especially benefits from an application of the Sepia processing preset. You can find it in the left sidebar of the Develop module, under Lightroom B&W Toned Presets. We've added a slight boost to the contrast, as well as the toning preset and -60 points of post-crop vignetting to slightly darken the edges and corners. The result is a nice atmospheric portrait.

AFTER
BEFORE

Getting Started with Lightroom

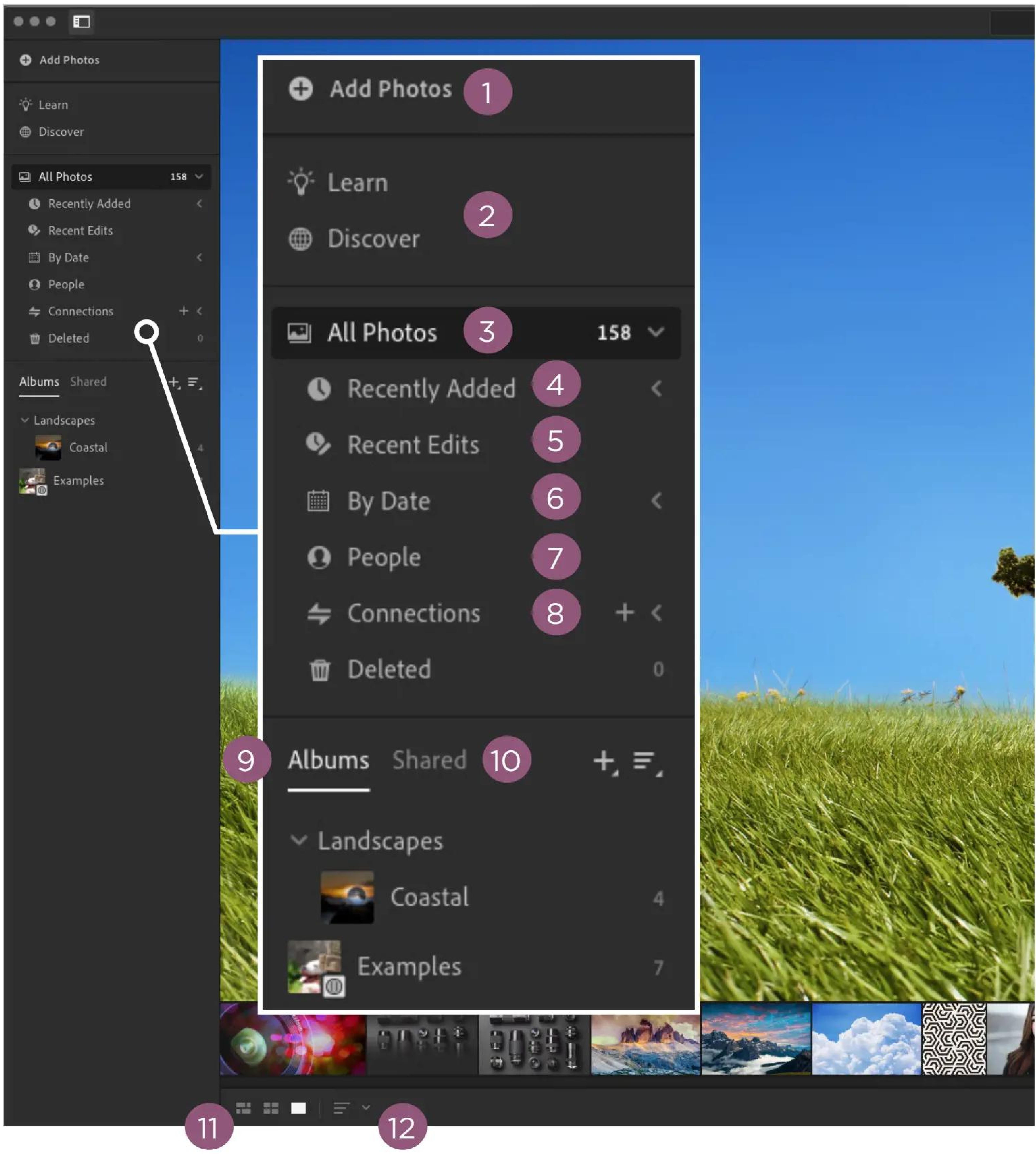
Adobe Lightroom is a cloud-based photo service. It is a much pared down version of its fully-featured cousin Lightroom Classic. There is no doubt it is a faster and more streamlined product for enthusiasts to use across multiple desktop and mobile platforms, with plenty of powerful features so you can stay synchronised and edit your photos anywhere.

Contents

Introduction to the workspace
Adjustments at a glance
Lightroom geometry editor
Lightroom workflow example
Lightroom on your mobile devices
Syncing Lightroom
Organising your mobile device
Image editing on the go
Sharing your Lightroom photos

Introduction to the Workspace

The Lightroom workspace is a more streamlined design than Lightroom Classic. It is designed to be quick and simple to use but no less powerful than the desktop version. It is an ideal platform for editing your photos if you are on the move using a tablet or phone.


Add Photos
1
Learn
Discover
2
All Photos
3
158
Recently Added
4
Recent Edits
5
By Date
6
People
7
Connections
8
Deleted
0
9
Albums
Shared
10
Landscapes
Coastal
4
Examples
7
11
12

1 Add Photos

If you want to import new photographs into your Lightroom catalogue or if you are starting from scratch, clicking this button will begin the process.

2 Learn & Discover

Clicking this button will reveal panels dedicated to helping you learn more about Lightroom and discovering work by other artists around the world.

3 All Photos

This is simply a complete listing of every photo you currently have in your library.

4 Recently Added

This filters your photos by the date you added them to your collection.

5 Recent Edits

This is a history of all the edits you've made to your current photo.

6 By Date

This breaks down your photo collection by the year they were taken.

7 People

Lightroom will scan your images and can identify any photos with faces in them for you to tag by named person if you wish.

8 Connections

Connections is a link that connects to Adobe Portfolio, a free website builder.

9 Albums

Any albums and folders created are displayed under this tab.

10 Shared

This section is concerned with how you share your images and albums to the rest of the world.

11 View Options

You can view your image library either in Photo Grid, Square Grid or Detail view. You can press G on your keyboard to cycle through the view options. Detail view is used when you make edits.

12 Sort

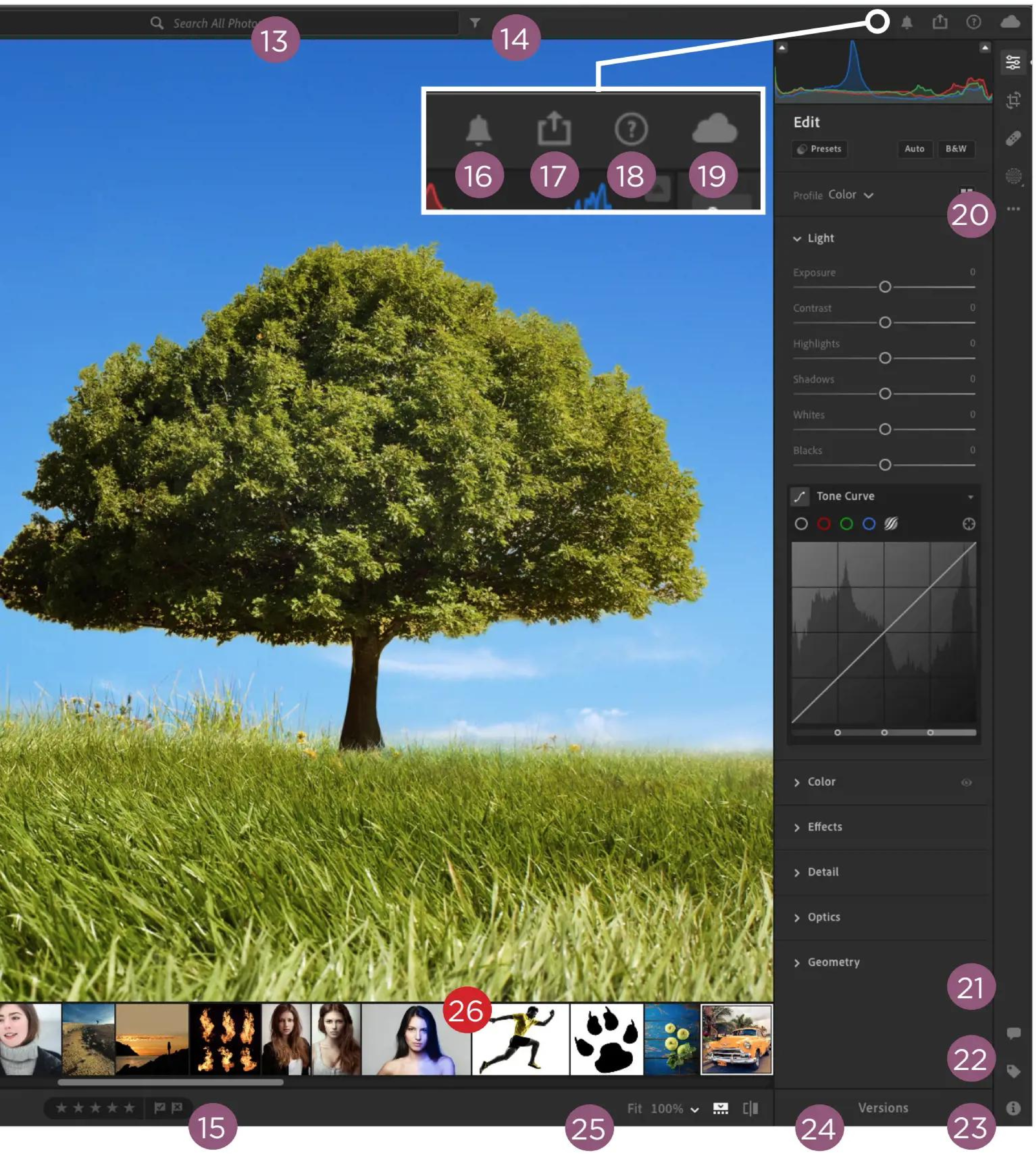
Under this menu are options to sort your photos by Capture Date, Import Date, Modified Date, Filename and Star Rating.

13 Search All Photos

In the Search All Photos panel you can type in any keywords to search your photo collection by. Your photos will need to have keywords added to them in order for this to work.

14 Refine Search

This calls up a panel that lets you search for images with additional parameters.



15 Picked or Rejected

These two icons will flag an image, or group of images, as Picked or Rejected. You can also add a Star Rating.

16 Notifications

Any notifications are shown here.

17 Save To

This button lets you save a copy of your image locally on your machine.

18 Help

This button opens a menu where you can view Getting Started tours of the app or view all the What's New features.

19 Cloud Storage Sync

Shows you the current status of your cloud storage.

20 Tools and Adjustments

These panels display all the main adjustments and tools you can use to process your images.

21 Activity

Any likes or comments on shared images will be shown here.

22 Keywords

Clicking on this icon opens the panel that lets you add keywords to your images, in groups or individually.

23 Info

The Info panel carries all information about the image currently selected.

24 Versions

A handy feature for creating snapshots of your current editing state.

25 Fit and Fill

Lets you scale the image, remove the filmstrip and show a before and after.

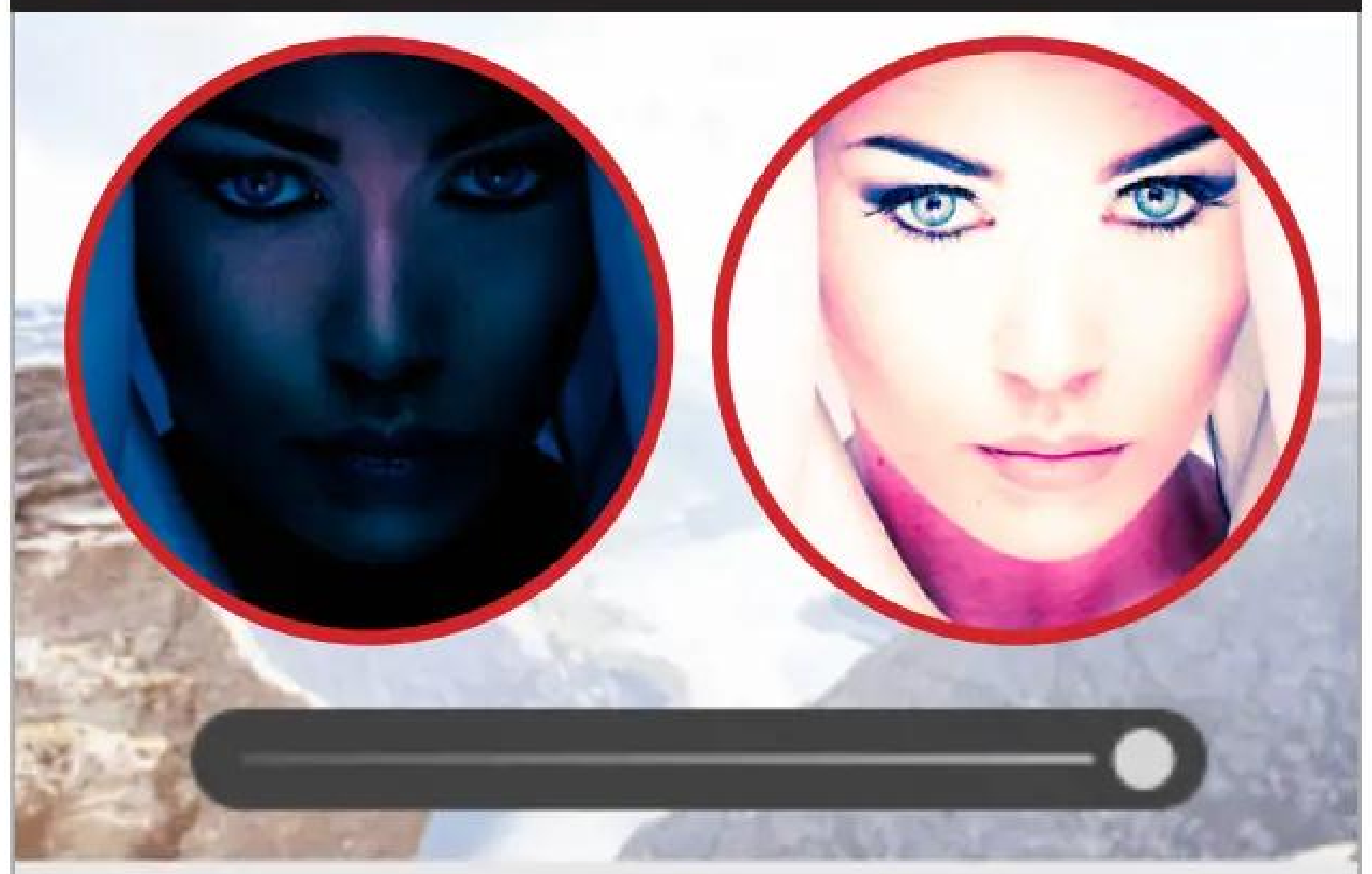
26 Filmstrip

This is a strip of thumbnail images so you can quickly identify photos you may want to work on.

Adjustments at a Glance

If you are new to image processing, some of the tools that are used and the effect they have on your images may be unfamiliar to you. Luckily, Lightroom provides some helpful tool tips to explain what each of the major adjustments actually do.

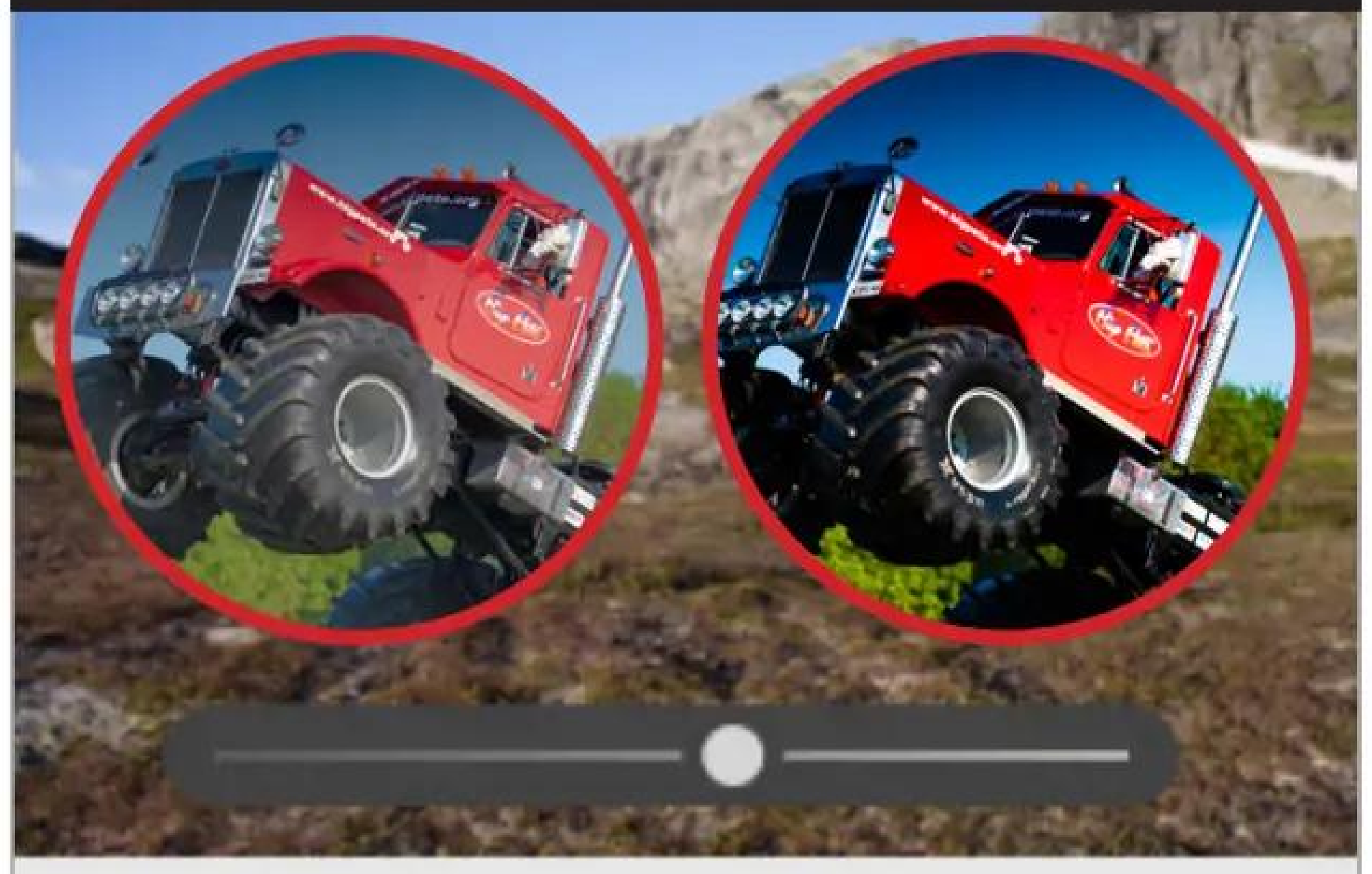
1 Exposure



Controls the brightness of your photo with a slider.

Move left to make the image darker and mimic underexposure; move right to make the image look overexposed.

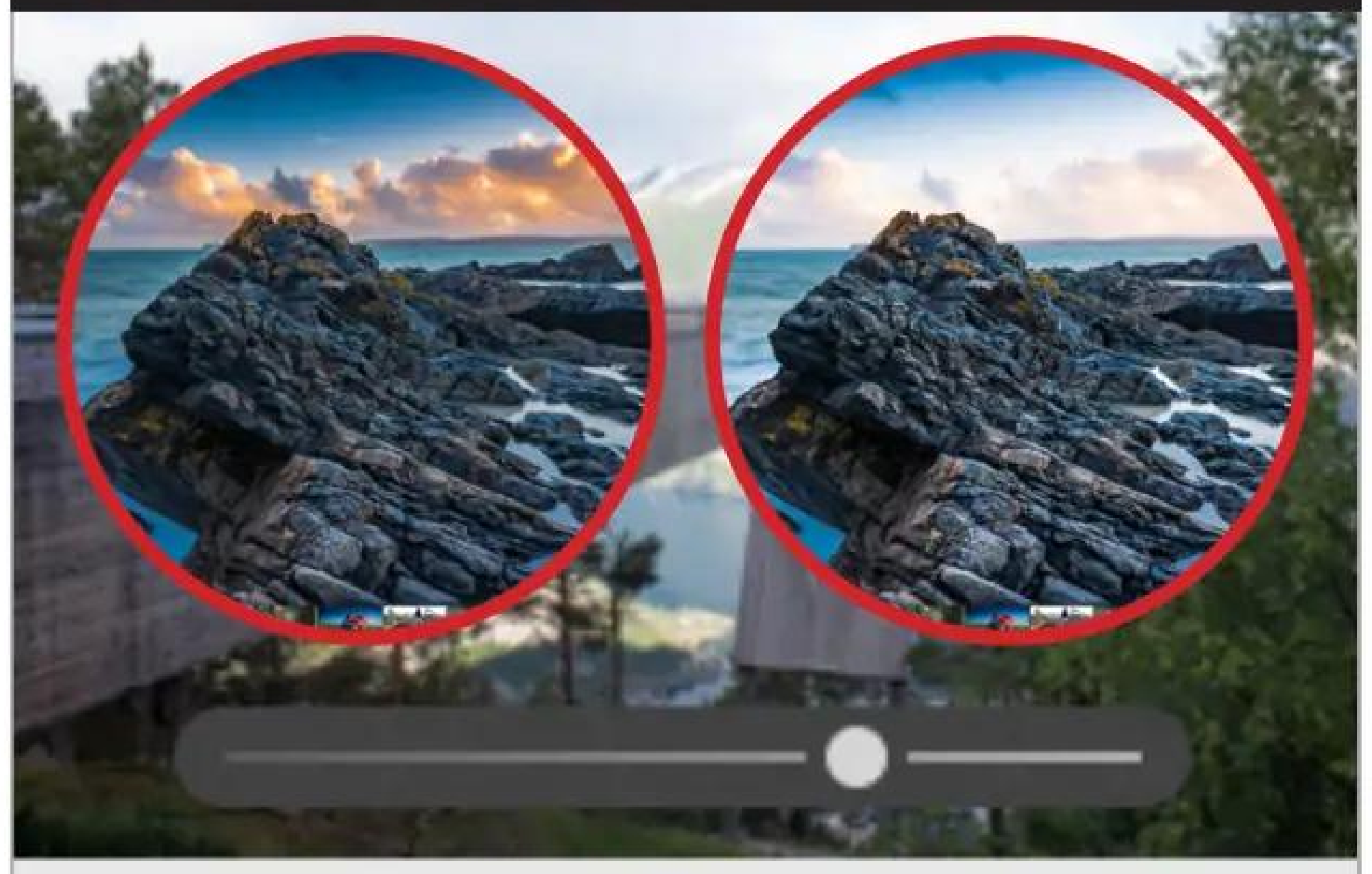
2 Contrast



Determines the contrast between light and dark colours.

Move left to flatten the contrast; move right to make the contrast more extreme and dramatic.

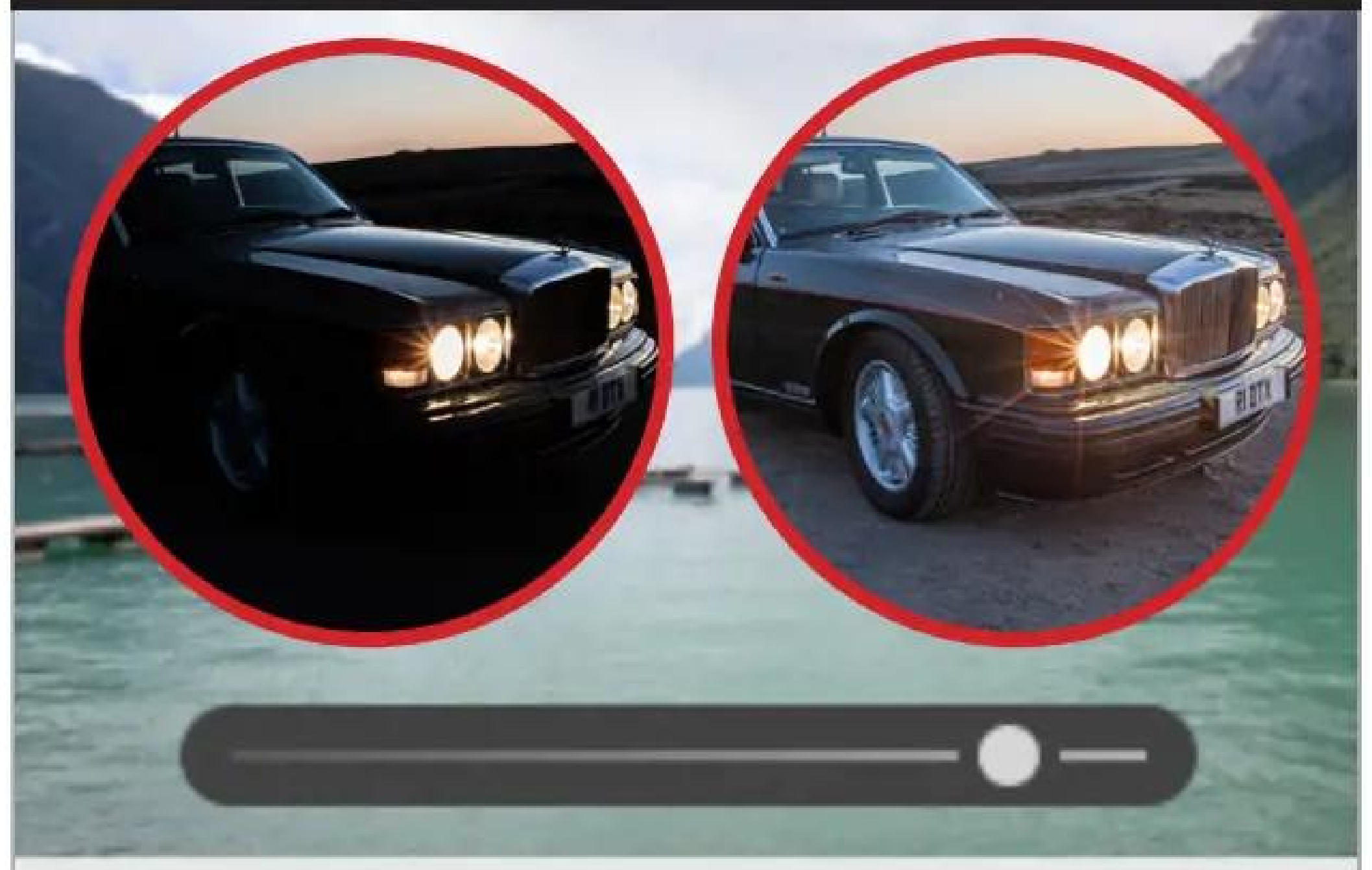
3 Highlights



Controls the brightness of the lighter parts of your photo.

Move left to darken highlights and recover details; move right to brighten them and reduce details.

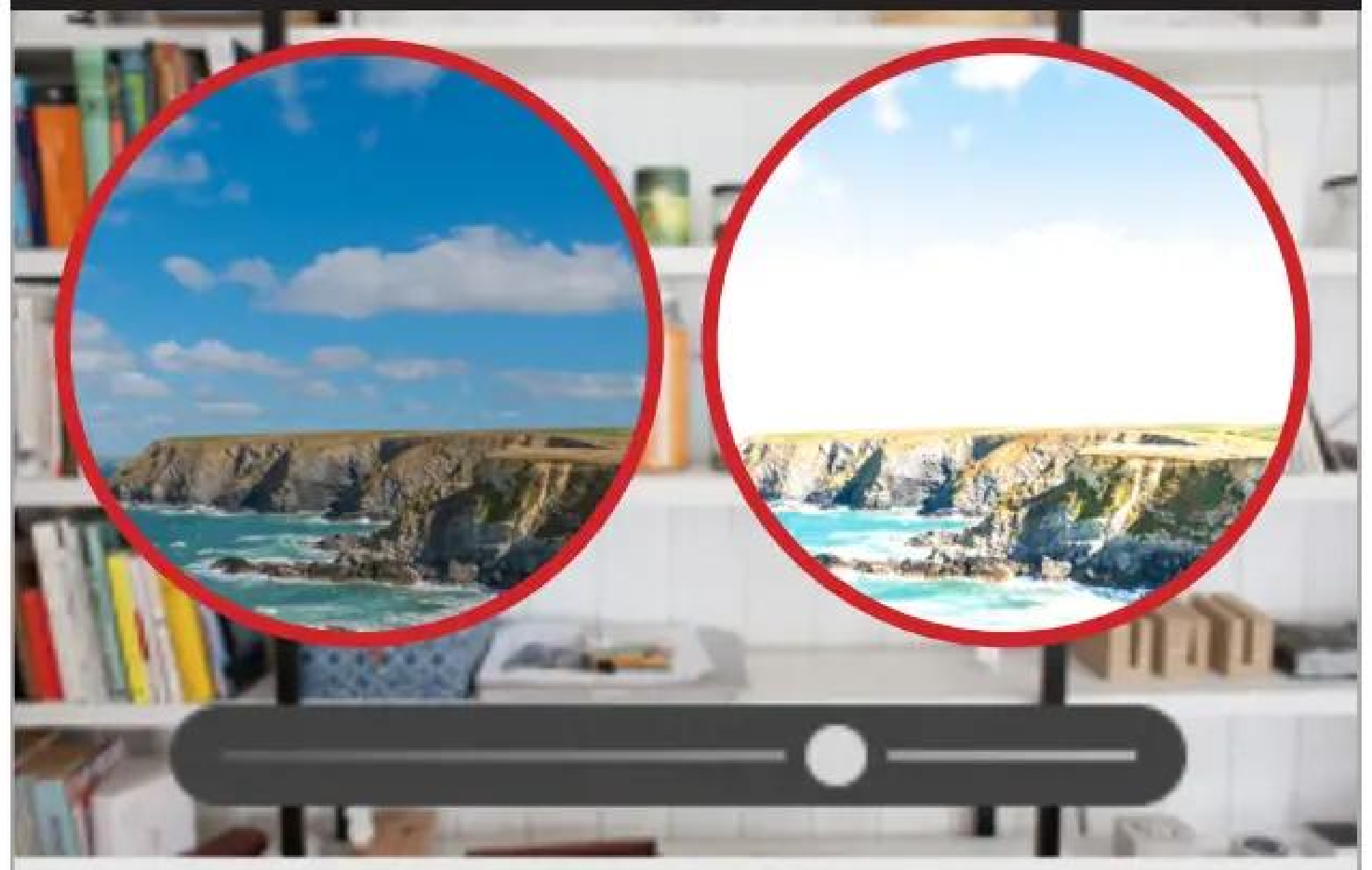
4 Shadows



Controls the brightness of the darker parts of your photo.

Move left to deepen shadows; move right to brighten them and recover more details.

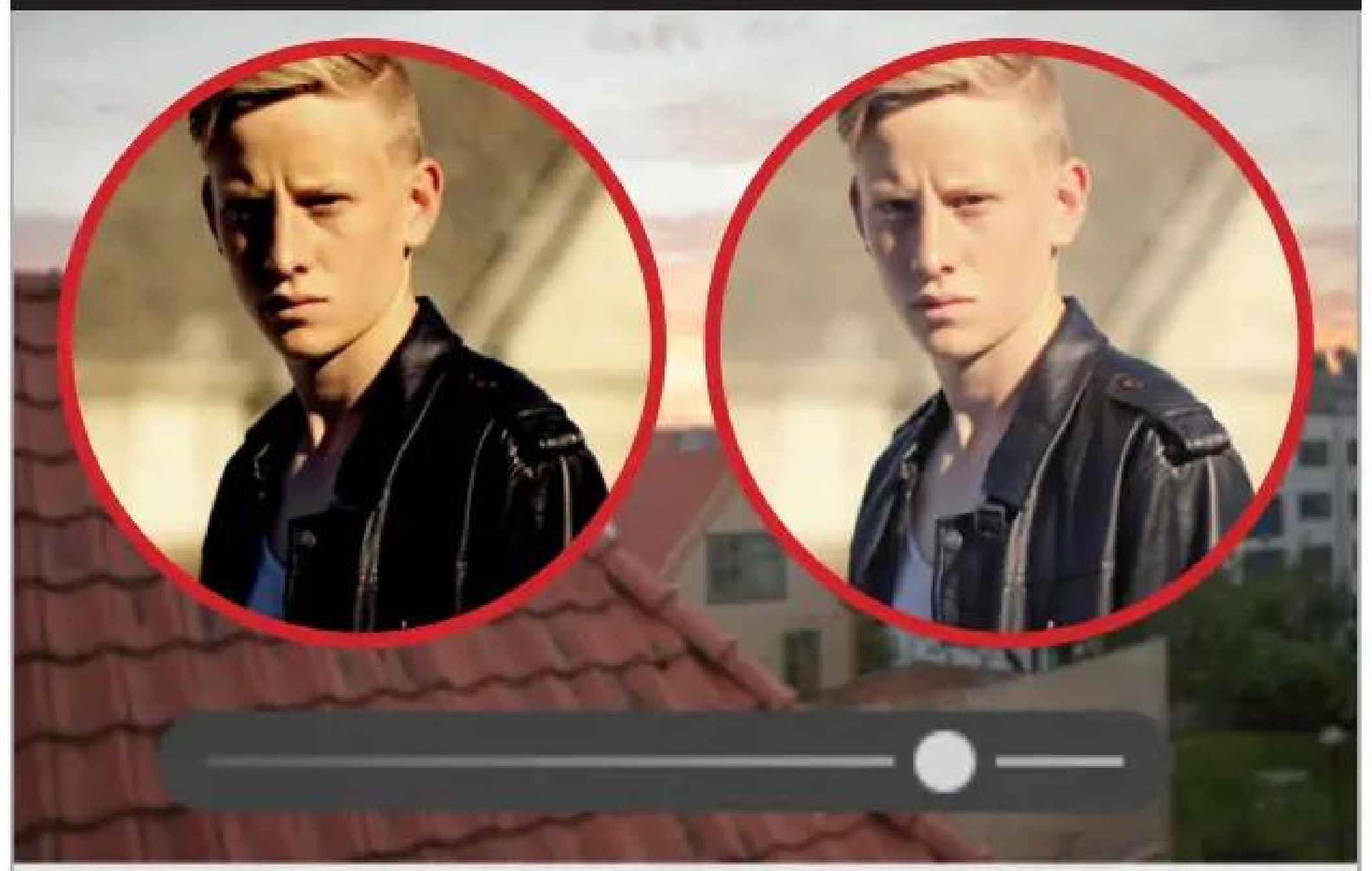
5 Whites



Use Whites to set the white point of the image.

Move slider to the right to make more colours appear completely white. Move to the left to darken lightest colours.

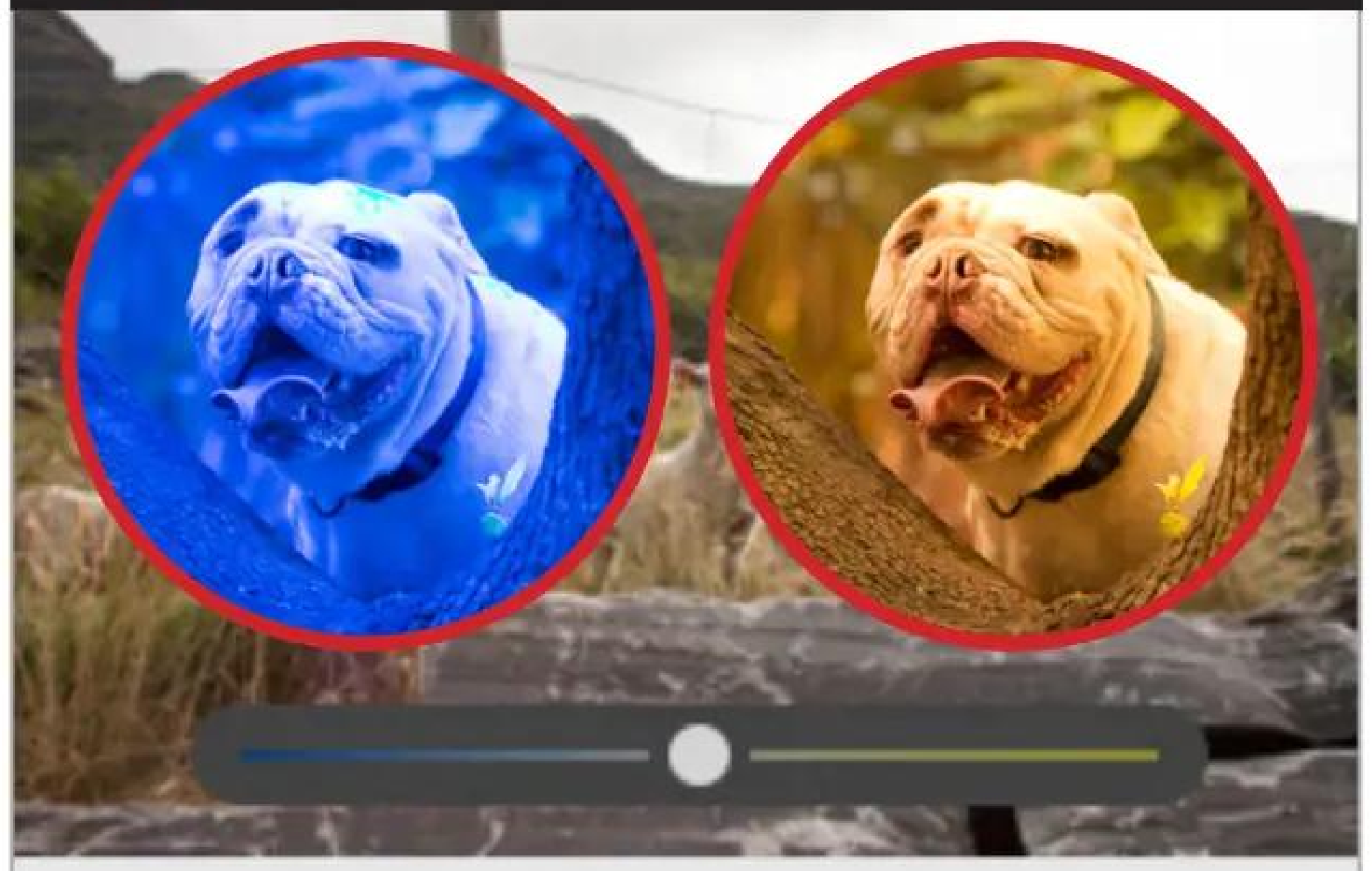
6 Blacks



Using Blacks sets the black point of your photographs.

Move slider left to make more colours appear completely black. Move to the right to make darkest colours lighter.

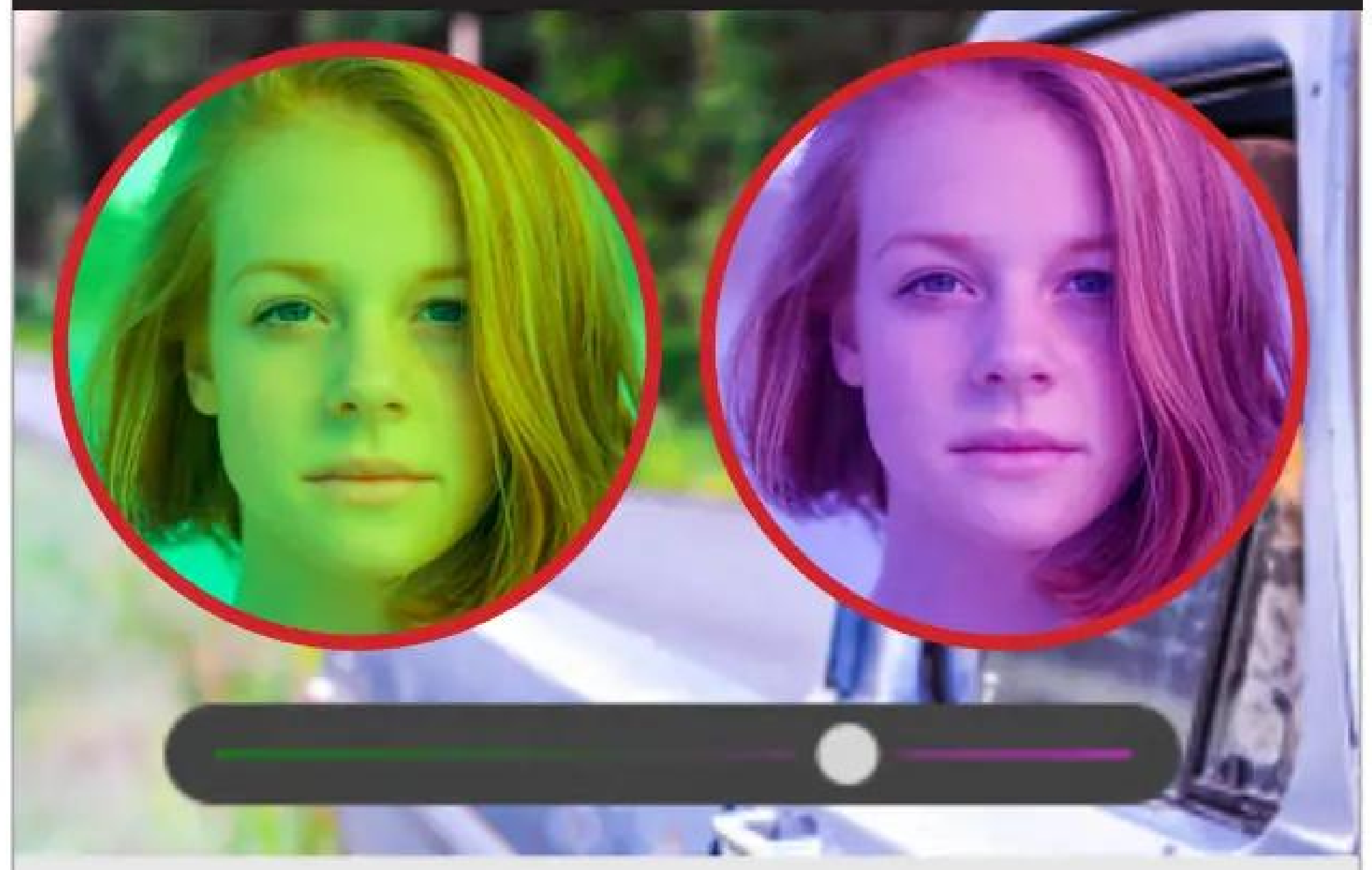
7 Temperature



Determines how warm or cool the colours appear in your photo.

Move left if colours are too yellow and warm; move to the right if colours are too blue and cool.

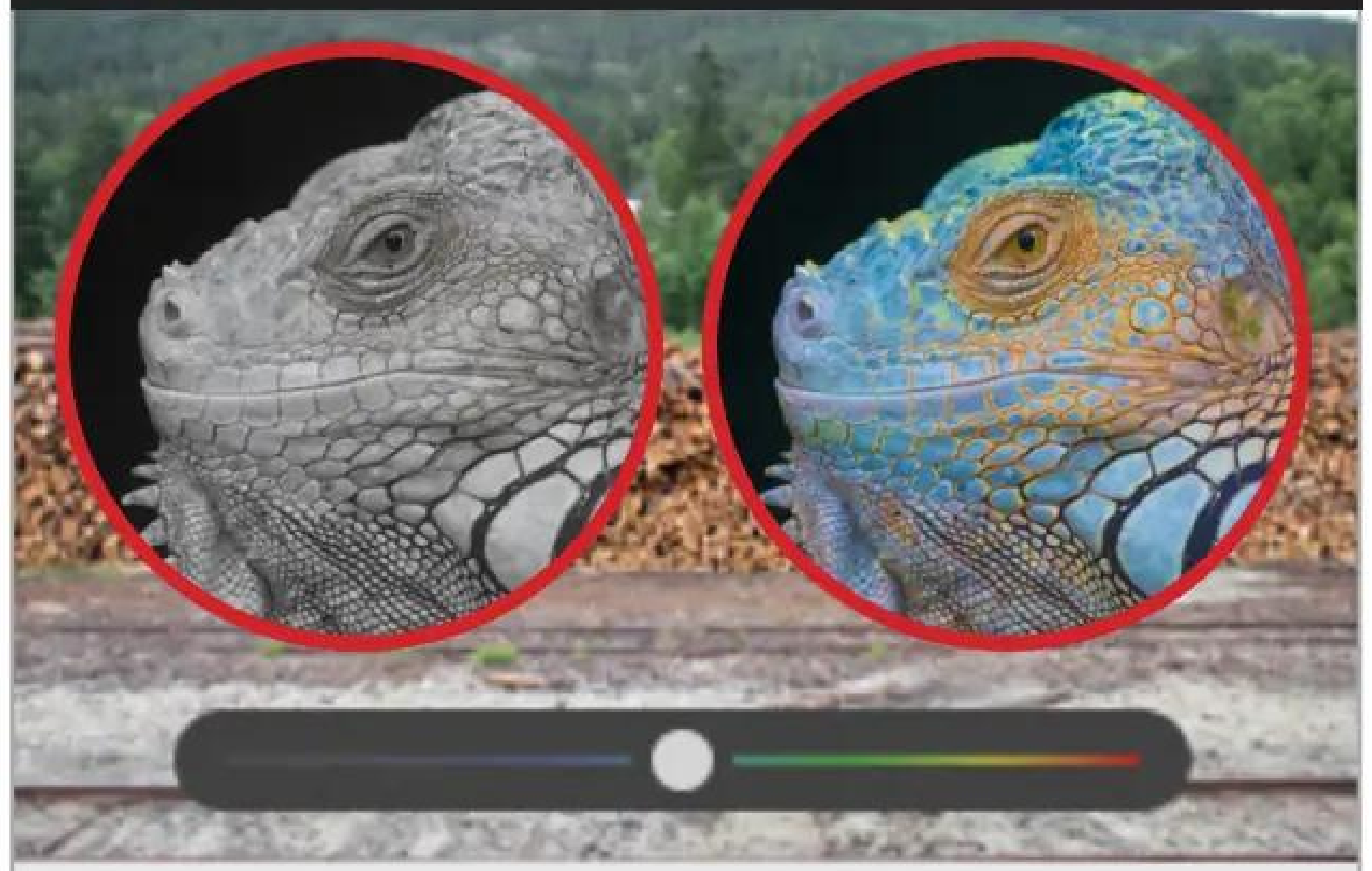
8 Tint



Determines how green or purple the colours appear in your photo.

Move left if colours in your photos are too purple; move to the right if colours are too green.

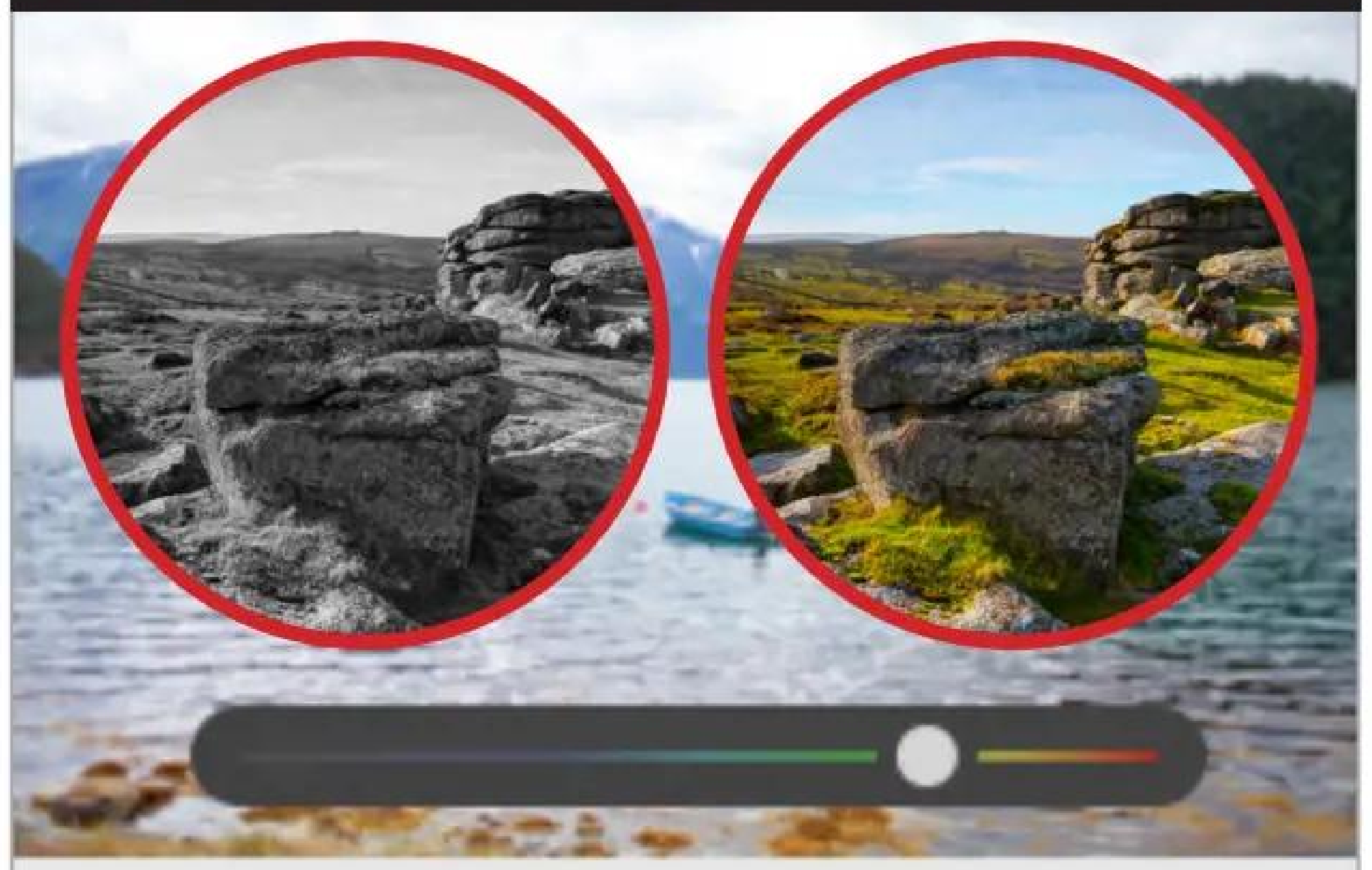
9 Vibrance



Changes the saturation without causing unpleasant colour casts.

Move the slider right to make more muted colours pop without the risk of oversaturation in your photos.

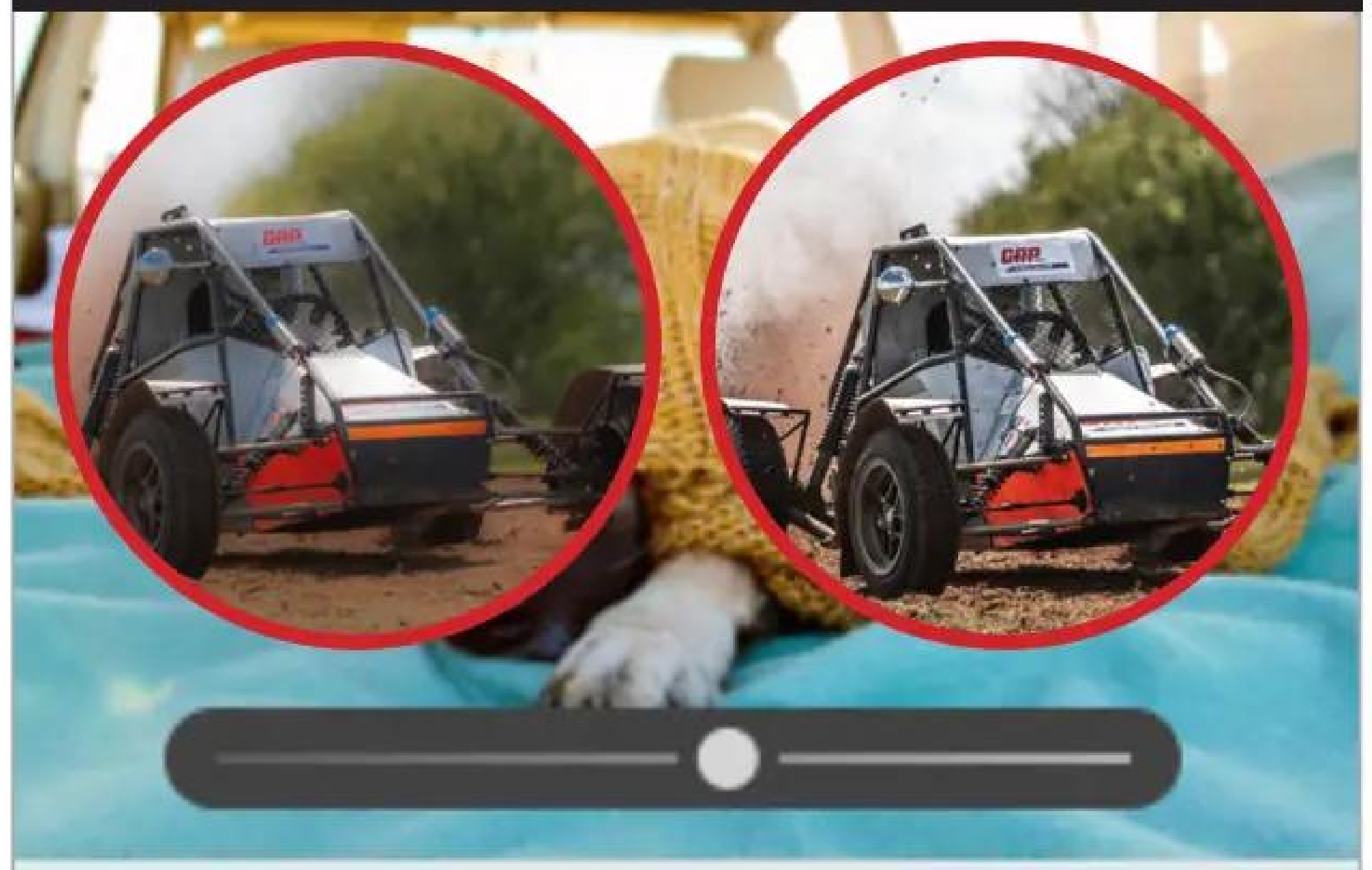
10 Saturation



Controls the saturation and vividness of all colours in the photo equally.

Move the slider to the left to make your photo grayscale in appearance; move the slider right to boost all colours at once.

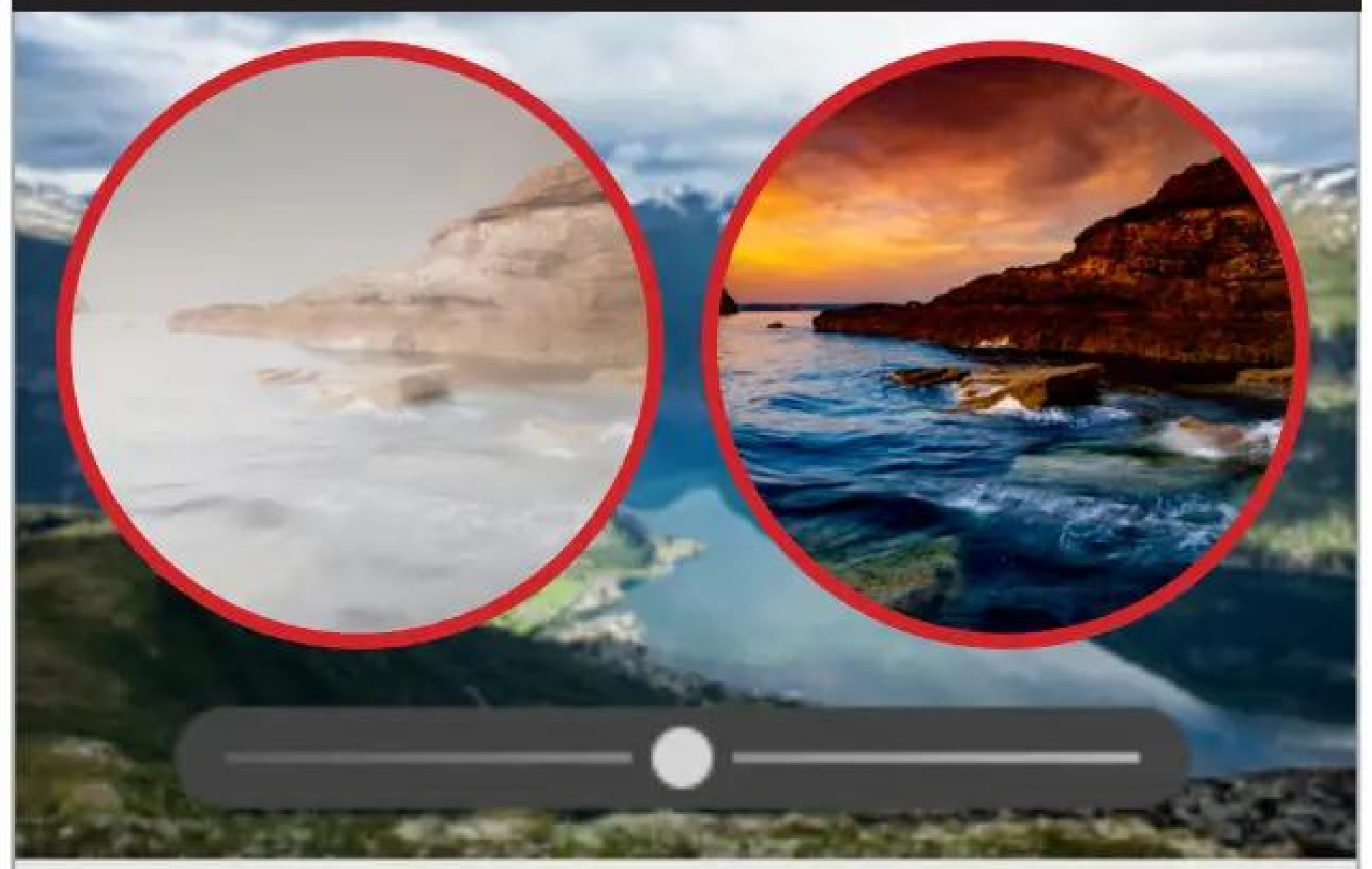
11 Clarity



Changes the contrast around the edges of objects in your photo.

Move left to soften portraits and reduce detail; move right to make landscapes more clear and rich in texture.

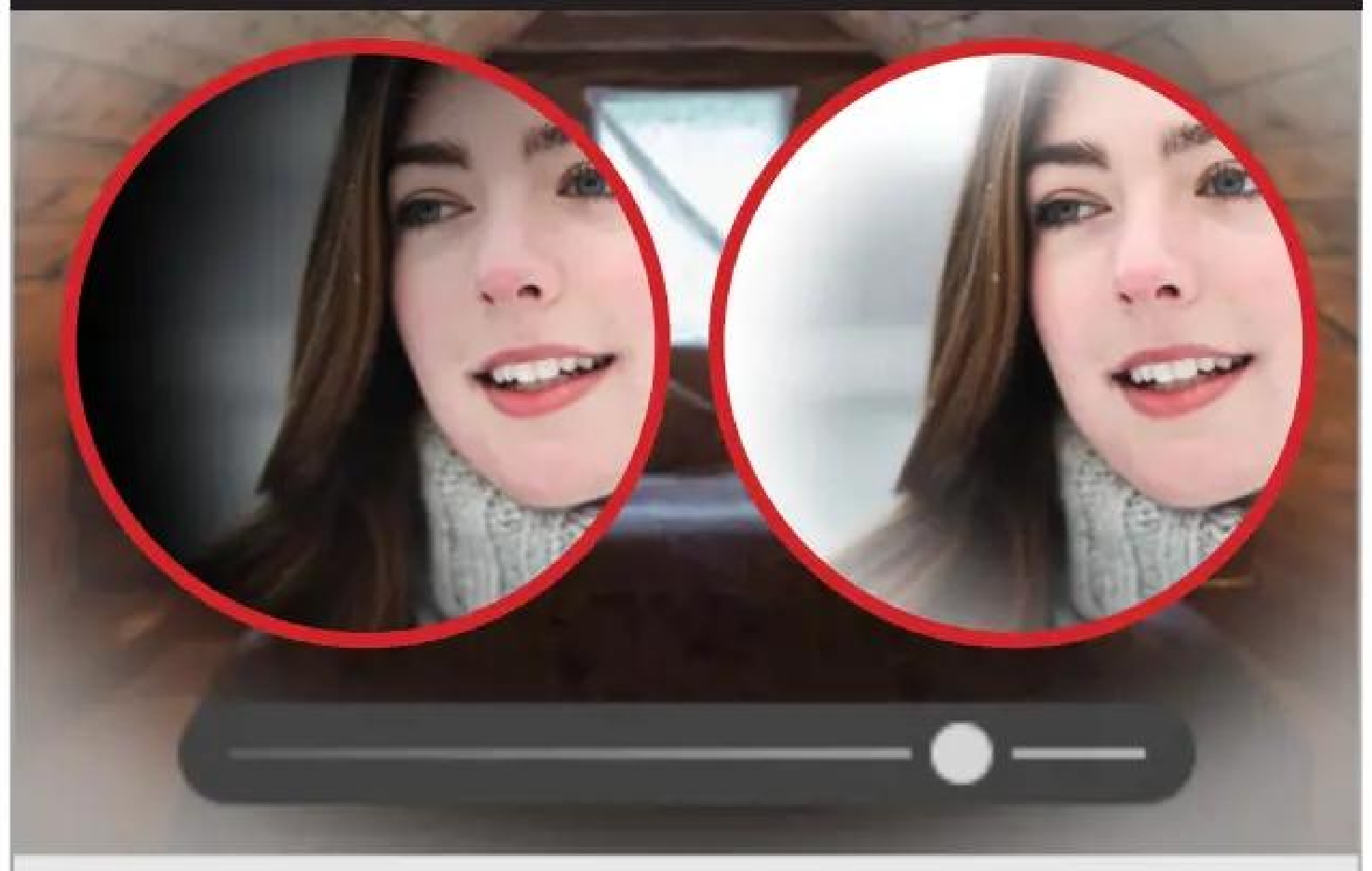
12 Dehaze



Dehaze adds or removes simulated haze effects to your photos.

Move left to add haze and make the image brighter; move right to remove haze and make the image much darker.

13 Vignette



Adds a soft vignette to the outer edges of your photos.

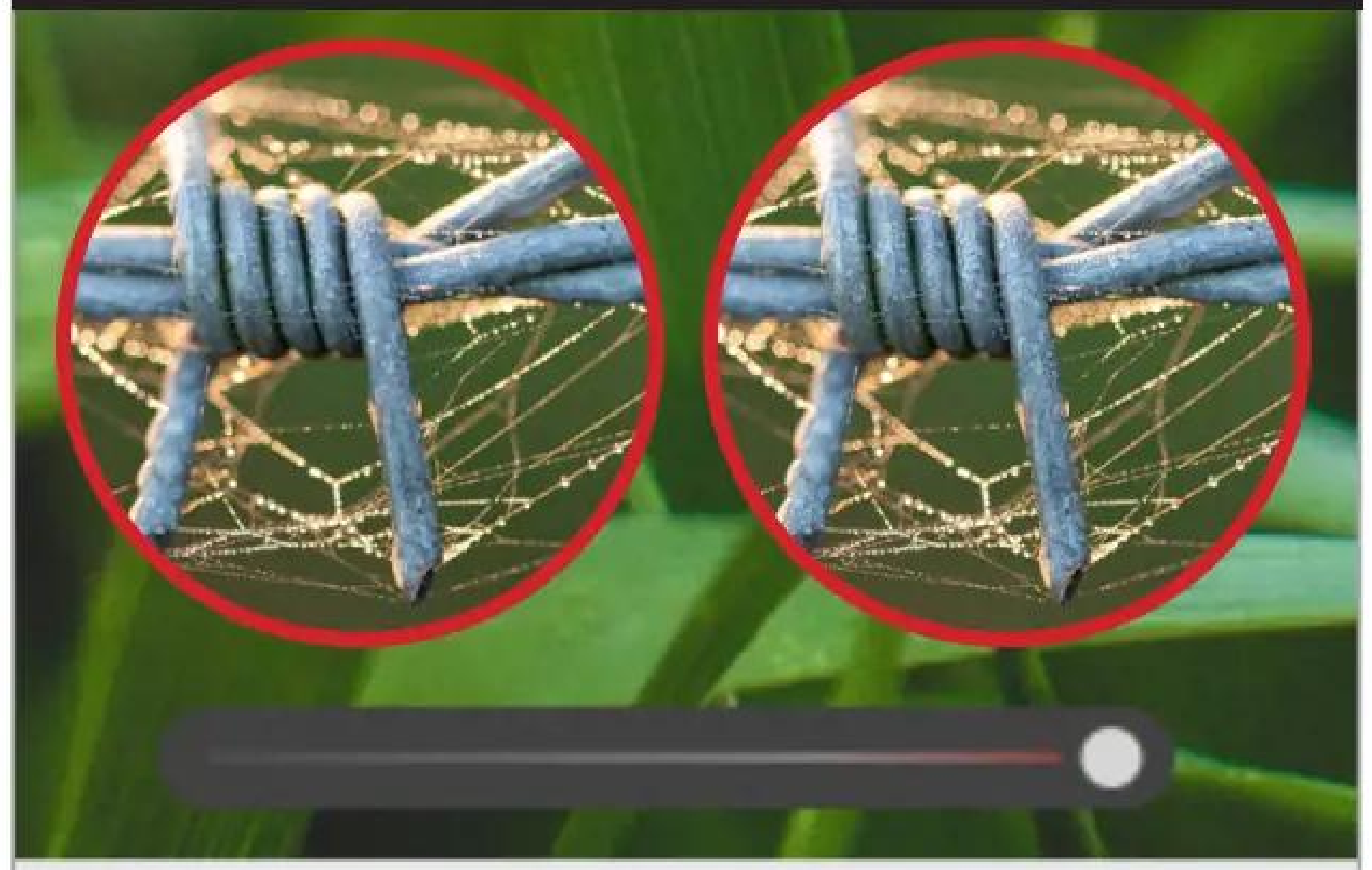
Slide left for a darker vignette and slide to the right for a brighter one. You can also control midpoint and feather.

14 Grain

Move the slider to the right to add a film grain effect.

The Grain effect makes your photos appear grainy as if taken on film stock. You can control Size and Roughness.

15 Sharpening

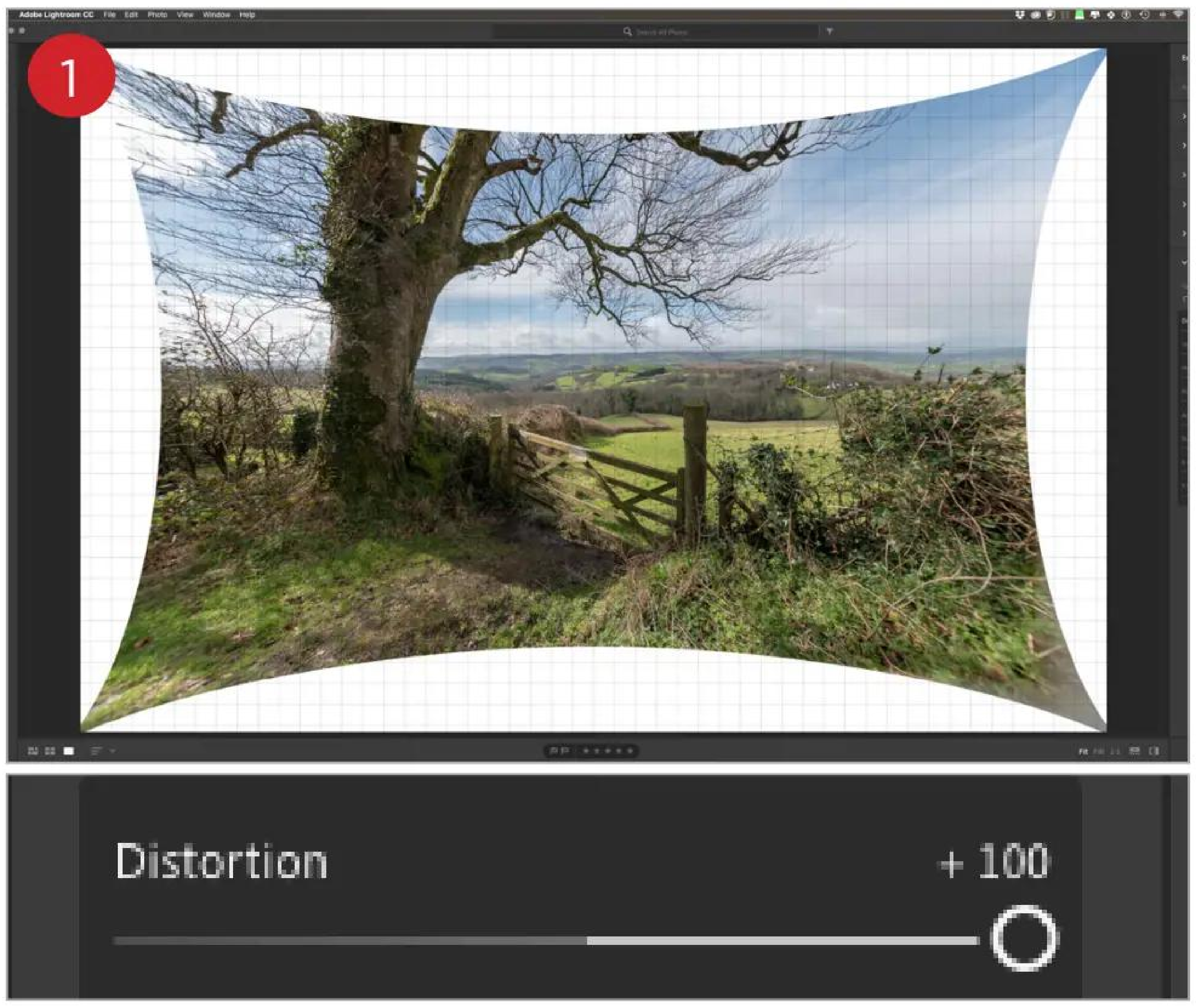


Move slider to the right to sharpen detail and texture in your images.

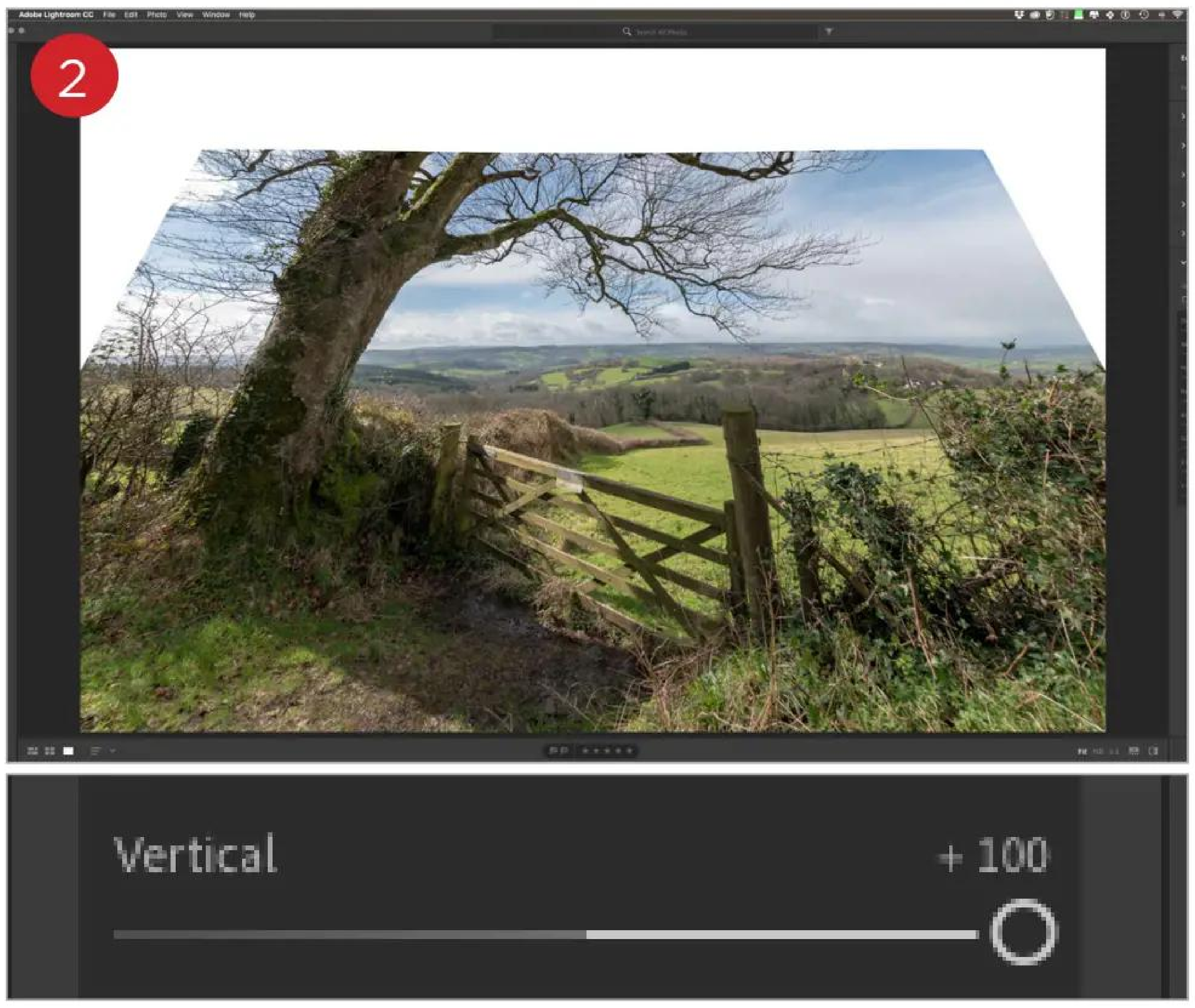
Use Sharpening to sharpen photos. You can control the Radius of the sharpen effect as well as Detail and Masking.

Lightroom Geometry Editor

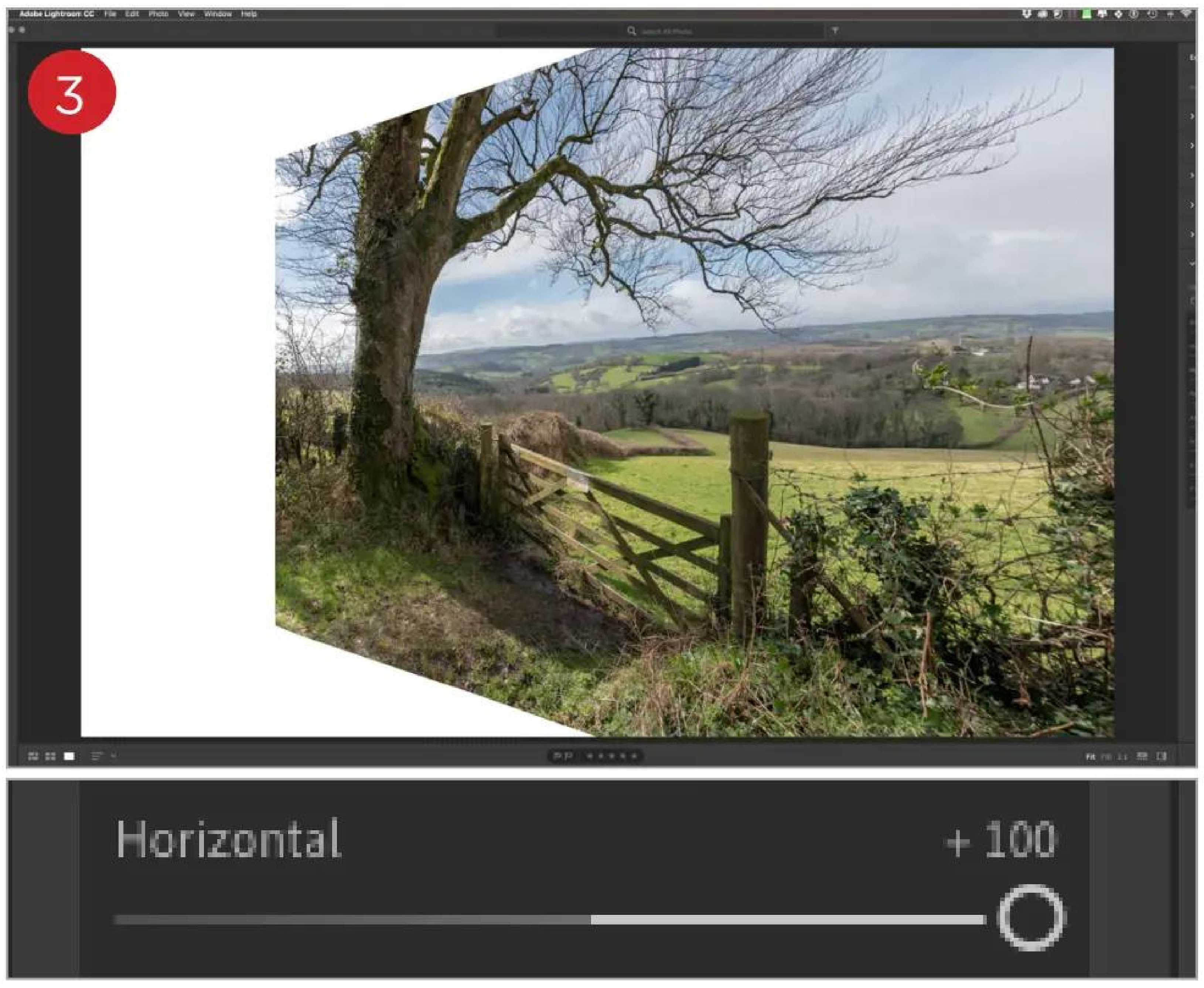
Recent versions of Lightroom offer you more tools that let you edit and manipulate the geometry of your photos. In this case, geometry refers to the proportions, size, rotation and distortion controls that can alter the physical shape of your photo. The eight controls are shown here.


1

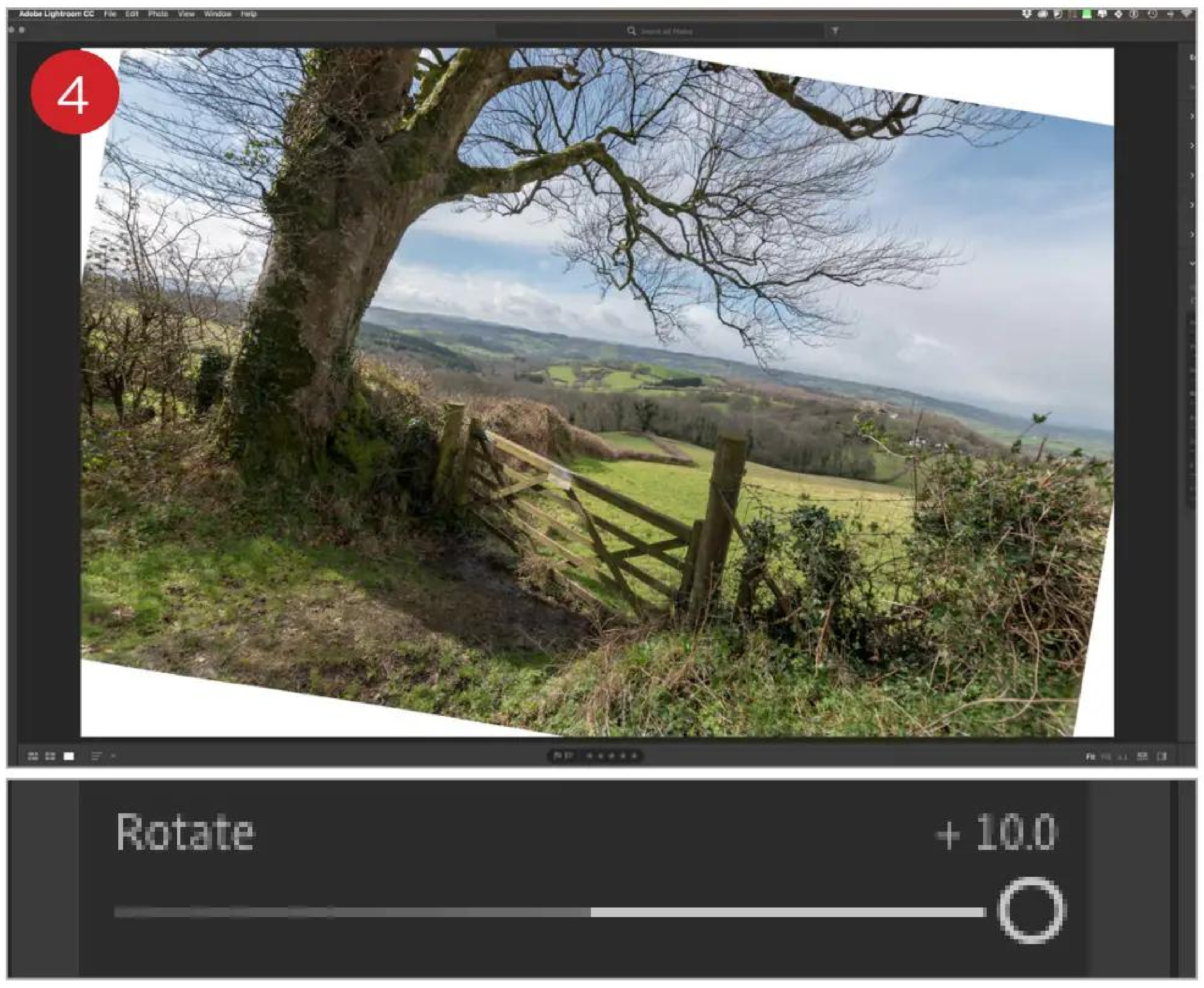
Distortion + 100


2

Vertical + 100


3

Horizontal + 100

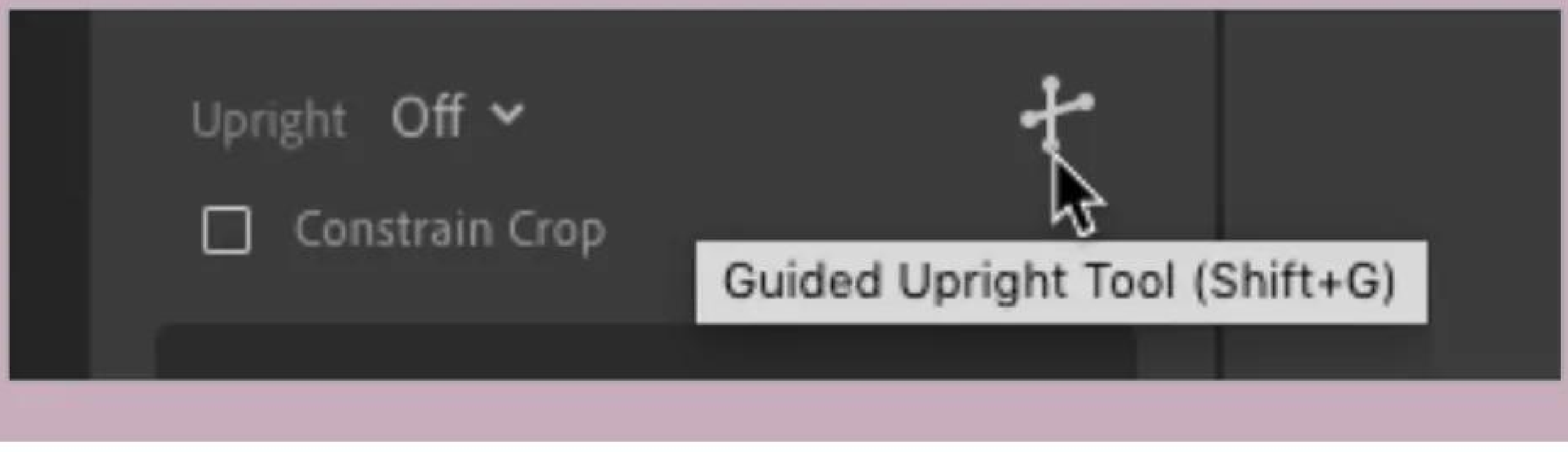

4

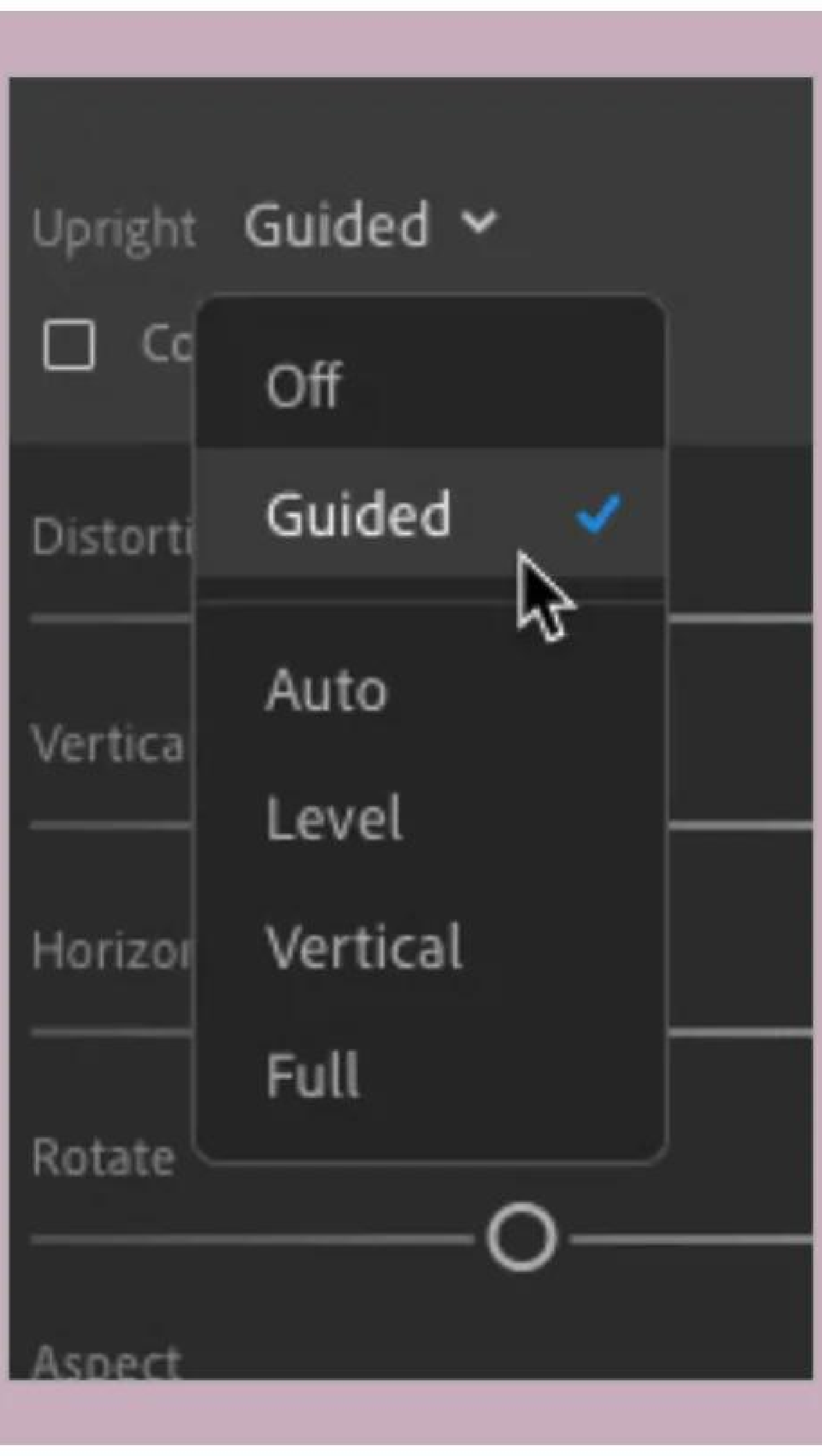
Rotate + 10.0

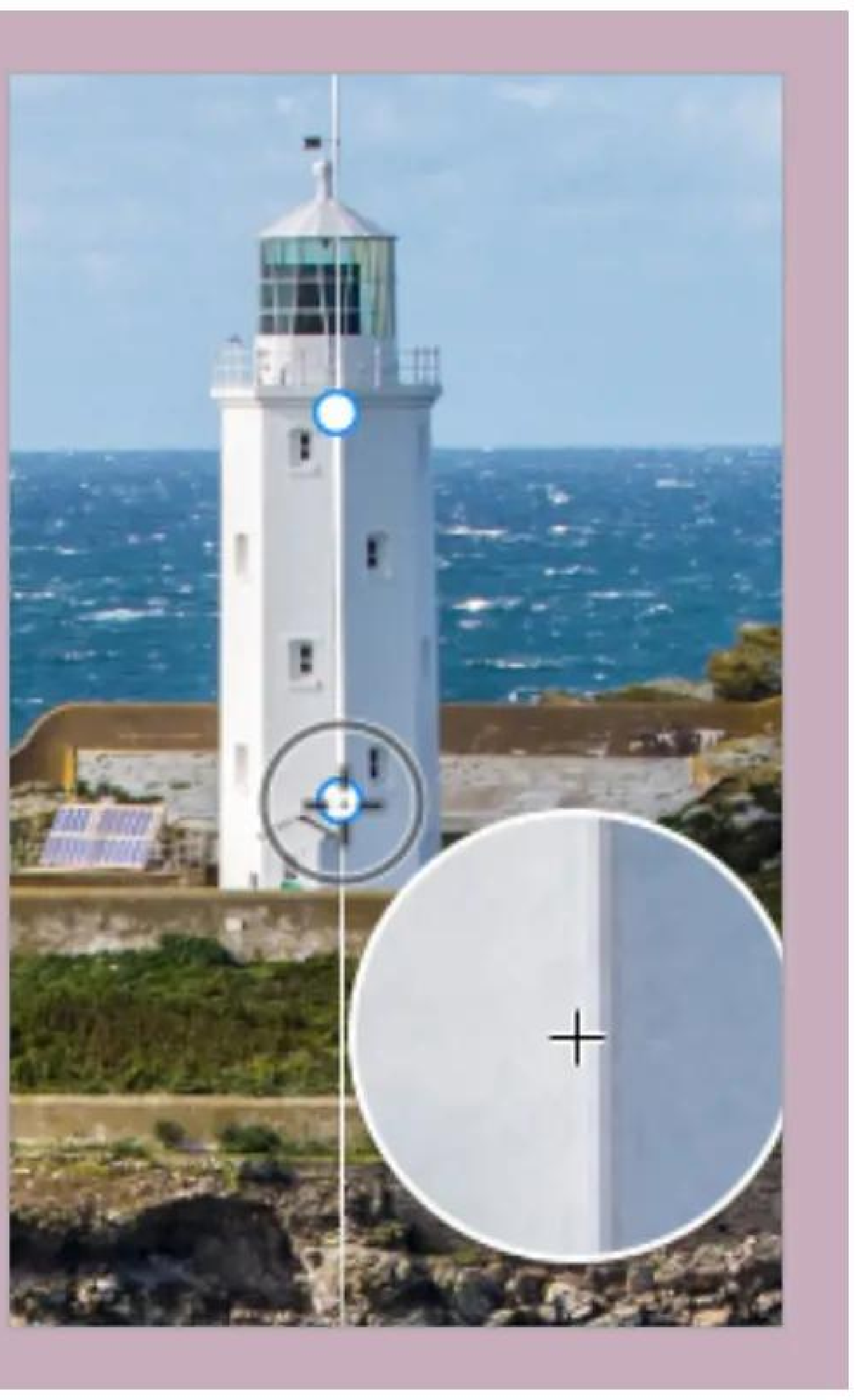
Transformation Guidance

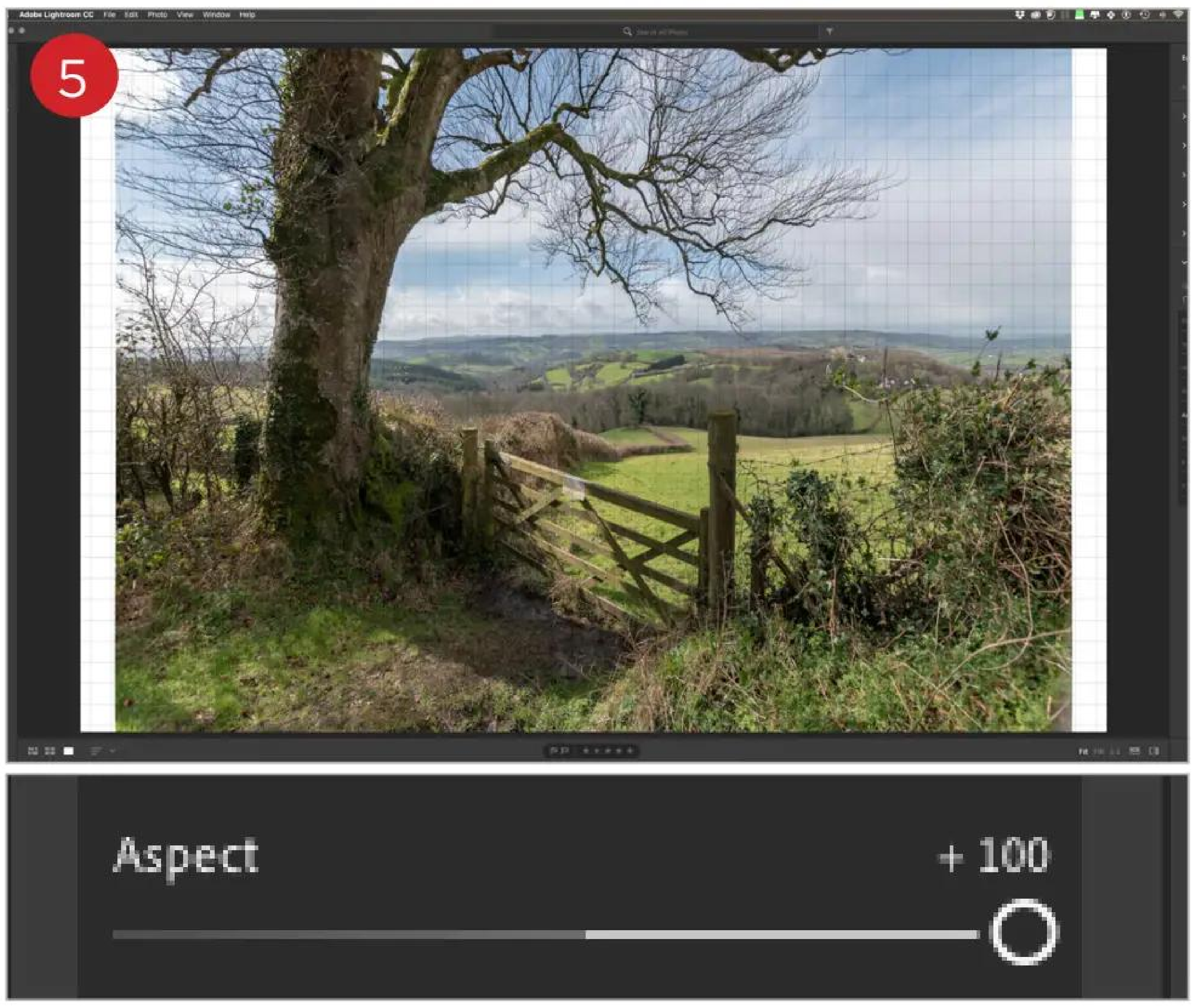
The eight geometry controls allow you to physically alter the shape of your photos. The geometry can be manually controlled by moving each of the sliders between values of -100% and +100% for some extreme transformations.

There are also options that let you specify which parts of your photo are level, on either the vertical or horizontal plane, by placing control points and letting the software work out the transformations required to bring those parts of the image back to straight and level.

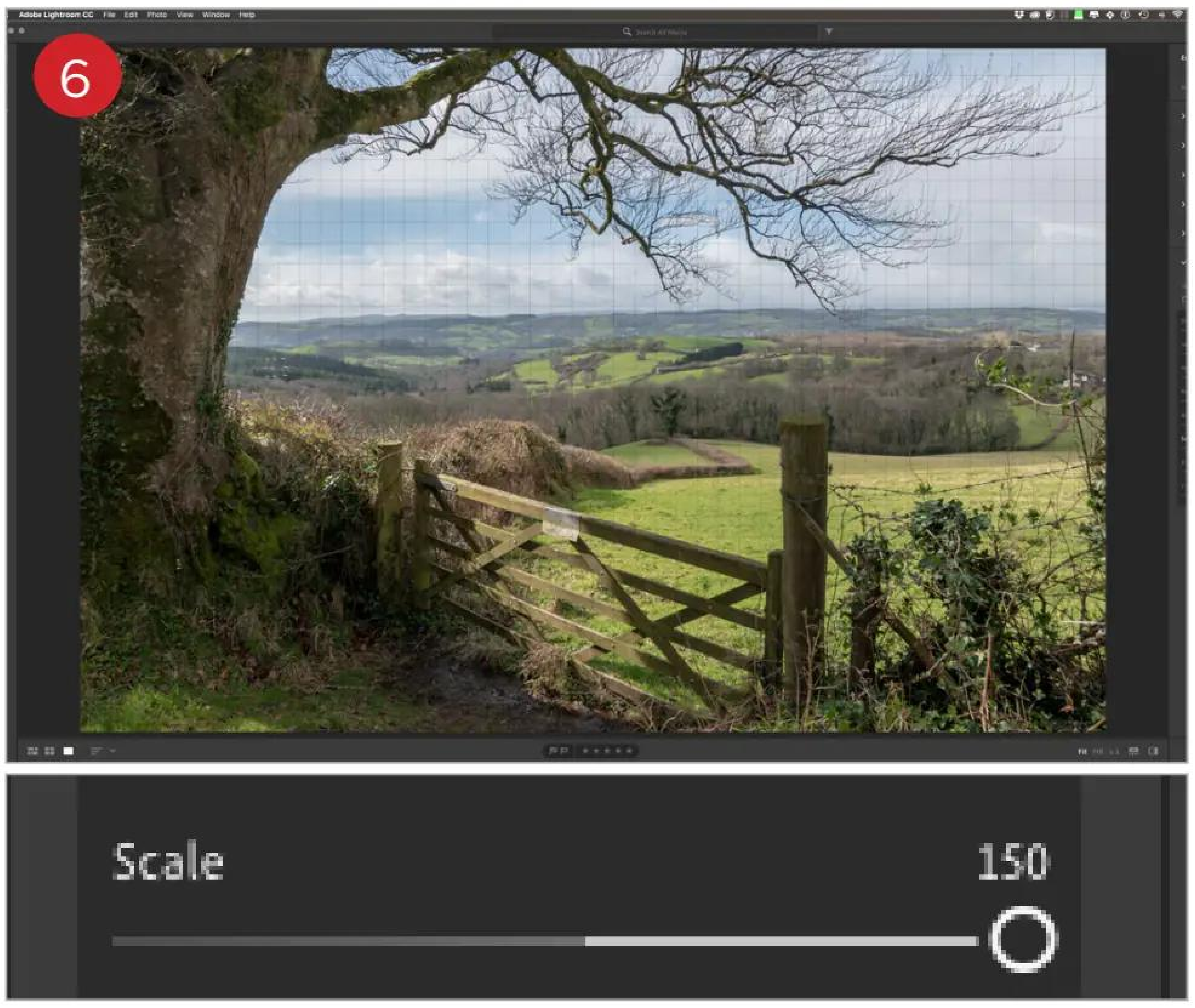

Upright Off
☐ Constrain Crop
Guided Upright Tool (Shift+G)


Upright Guided
Off
Guided ✓
Auto
Level
Vertical
Full
Distorti
Vertica
Horizo
Rotate
Aspect

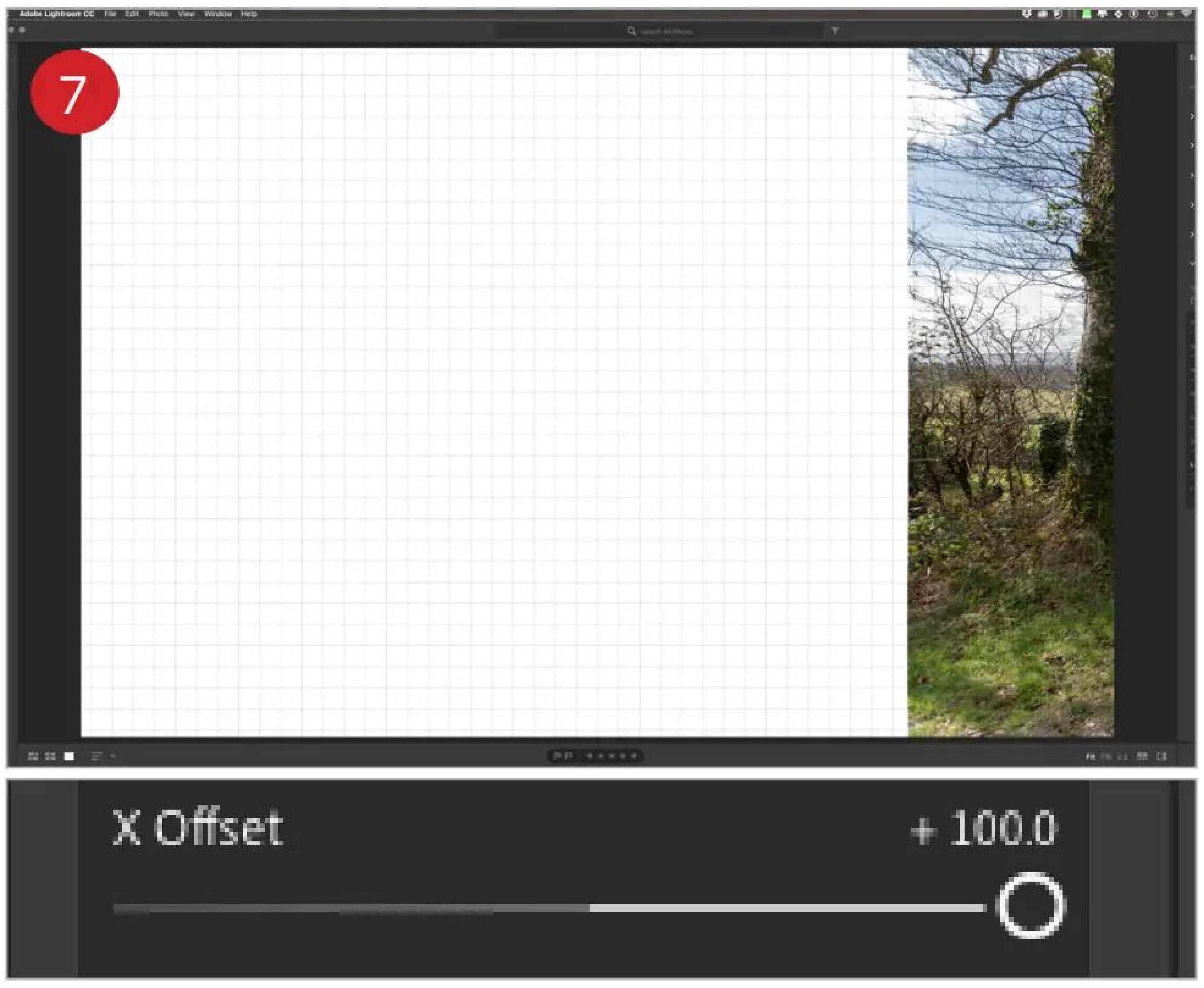




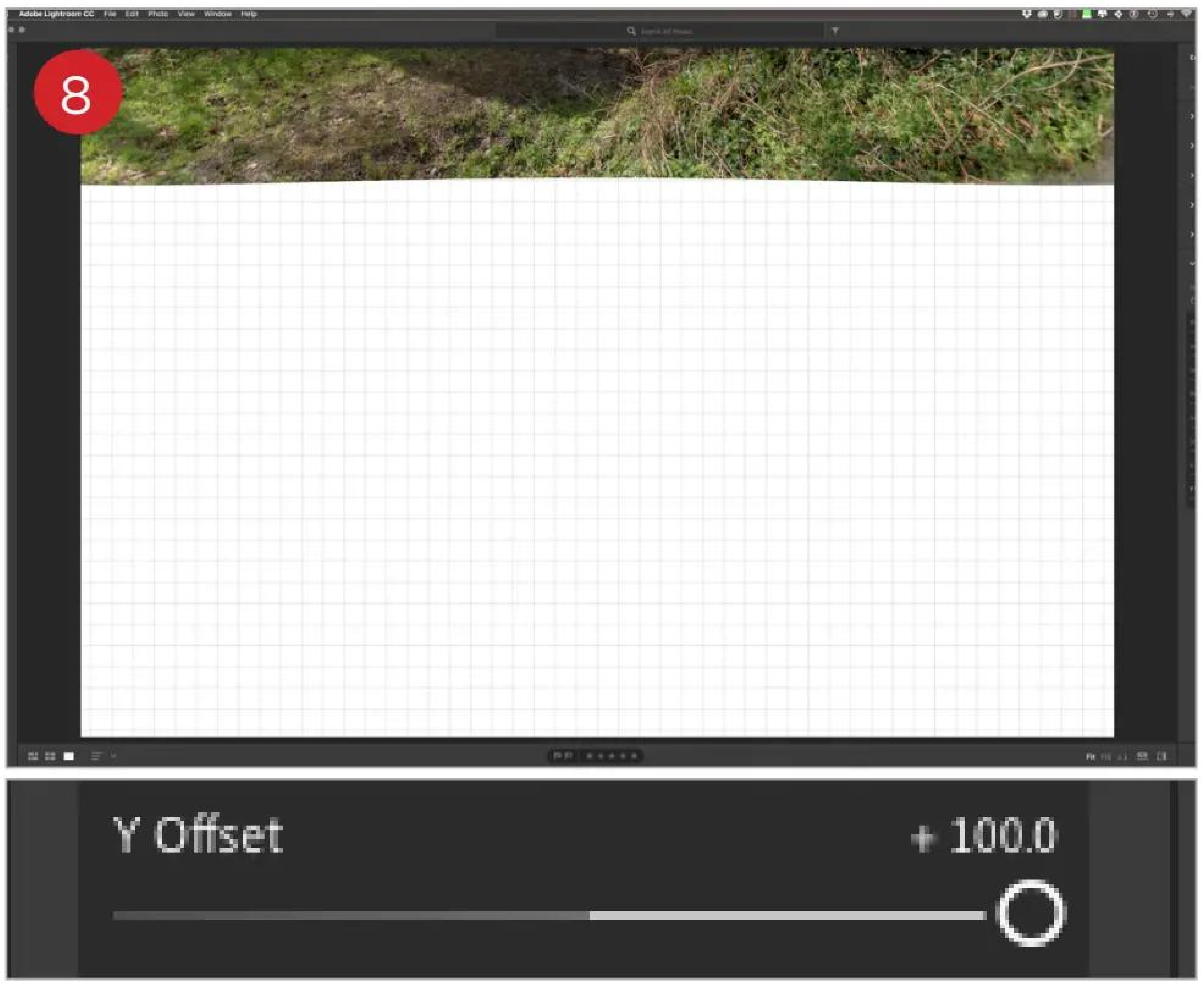
Aspect + 100



Scale 150



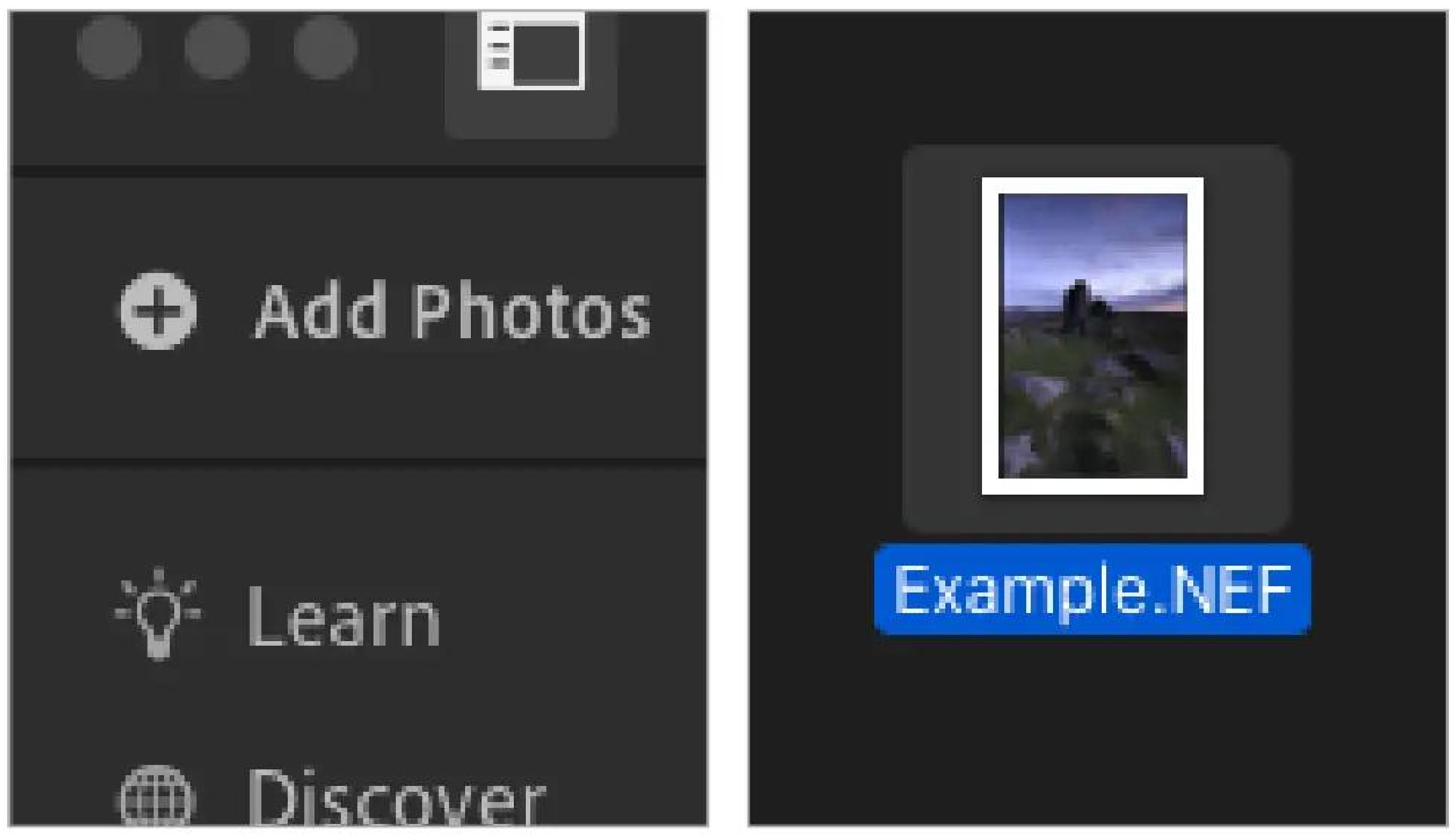
X Offset + 100.0



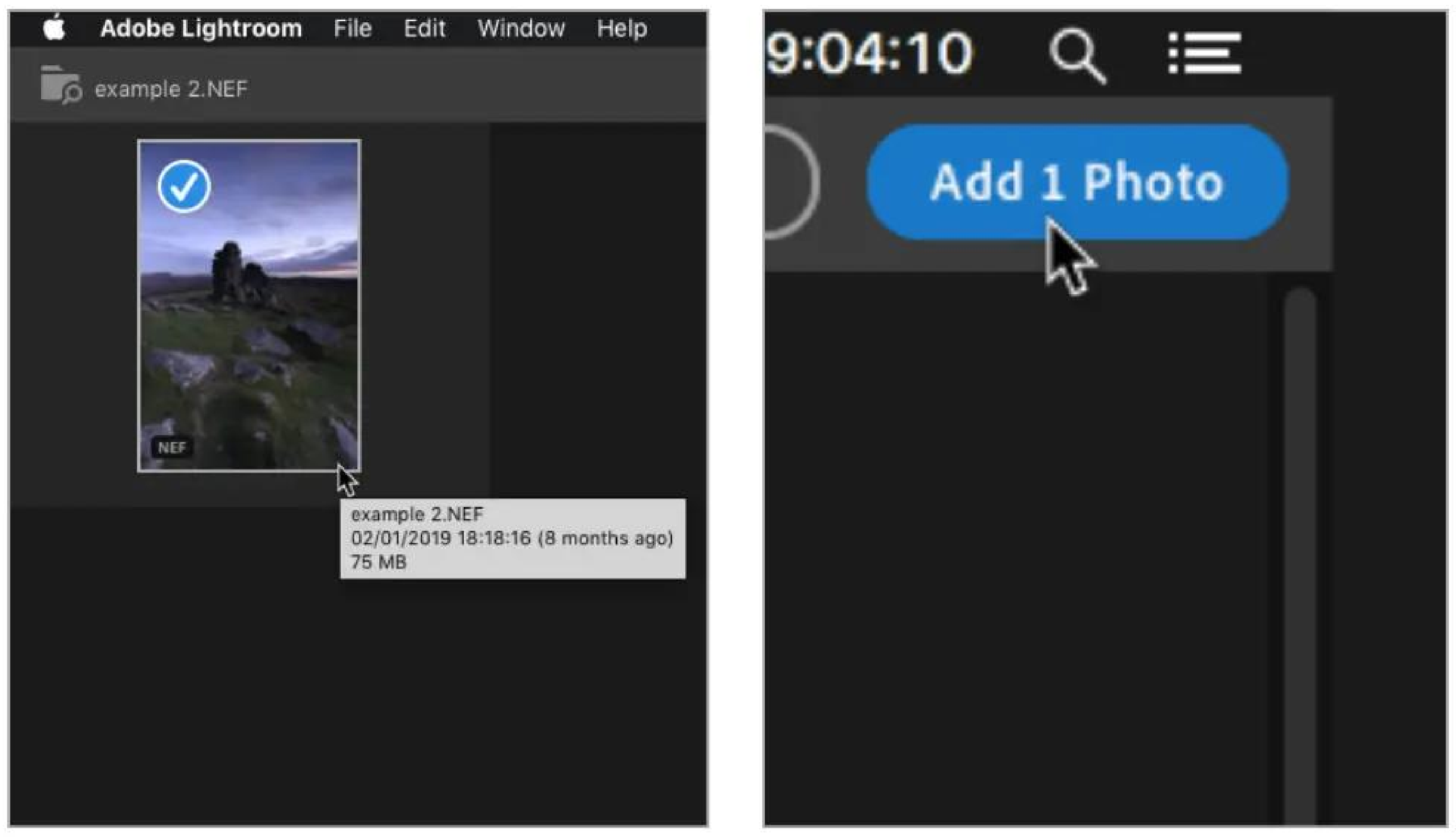
Y Offset + 100.0

Lightroom Workflow Example

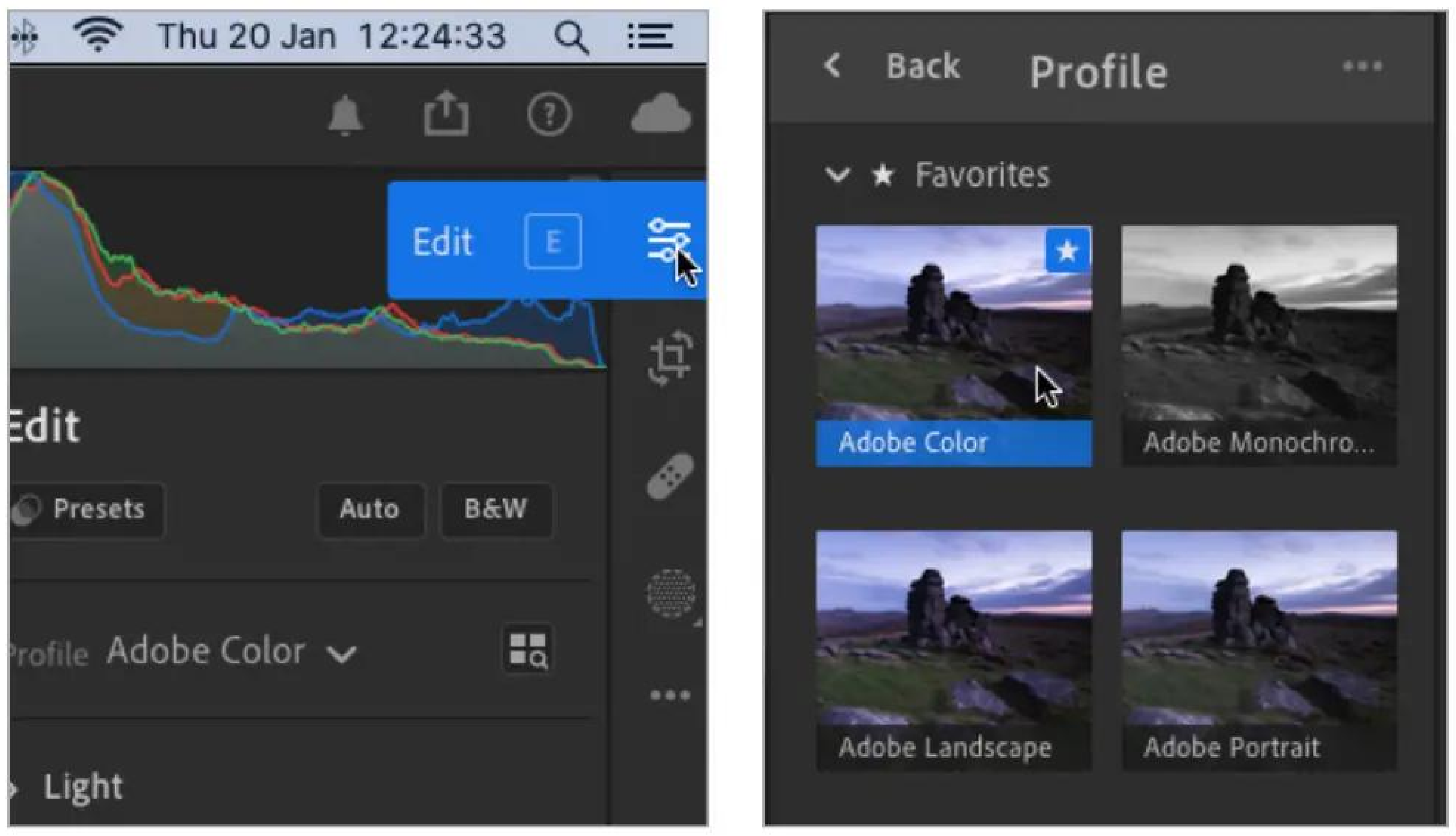
All users of Adobe's Creative Cloud Photography Plan get Photoshop, Lightroom Classic and the latest Lightroom in their monthly subscription. Let's take a more detailed look at the mobile focused version and show you what it's capable of.


Add Photos
Learn
Discover
Example.NEF

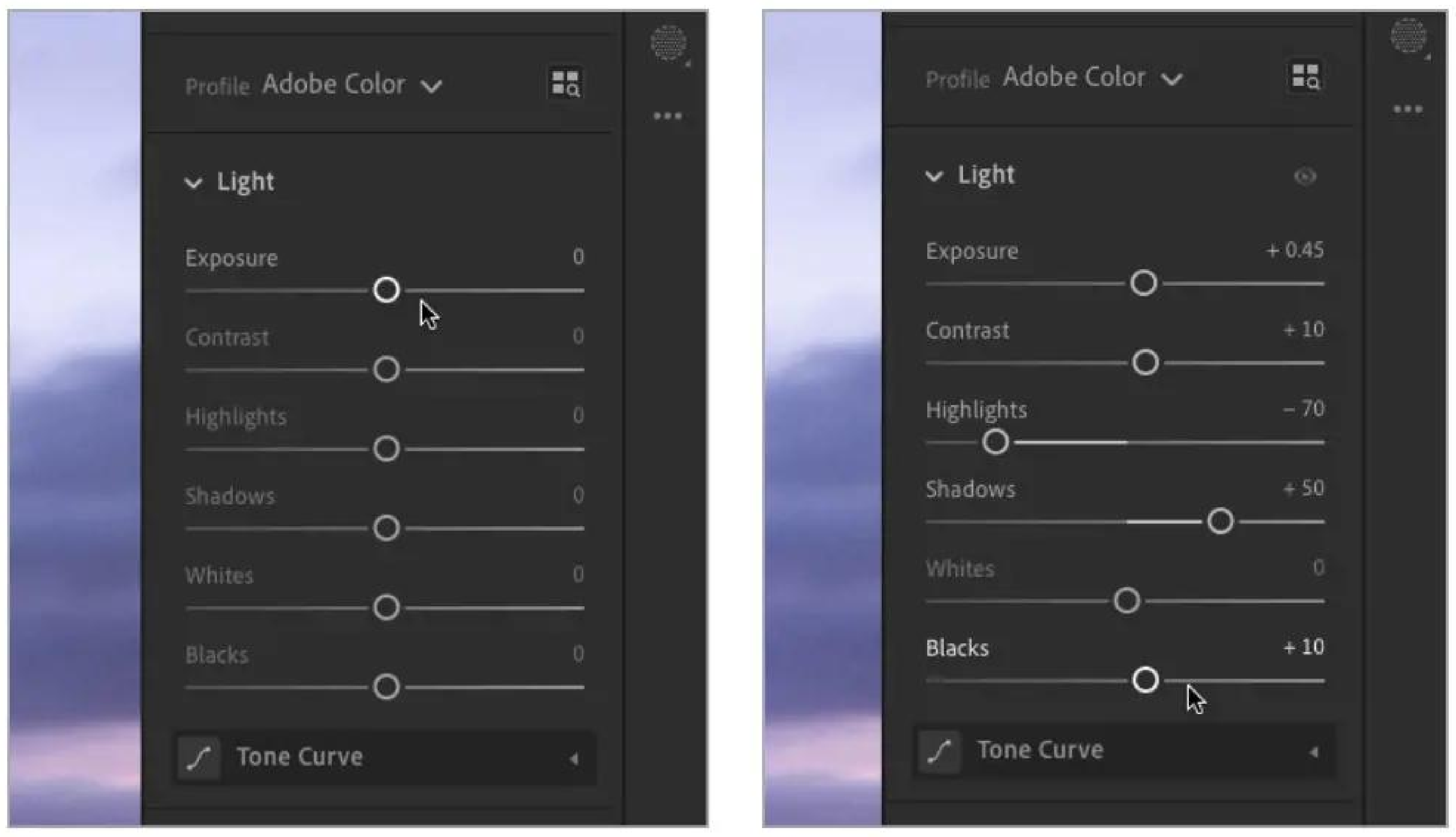
1 Start the process by opening Lightroom and, if you haven't already imported the photos with which you want to work, begin to add new images by clicking the plus symbol in the top left corner and then clicking on Browse. For our processing workflow example, we browsed to a Raw file of a rocky landscape and double-clicked it to continue.


Adobe Lightroom File Edit Window Help
example 2.NEF
NEF
example 2.NEF
02/01/2019 18:18:16 (8 months ago)
75 MB
9:04:10
Add 1 Photo

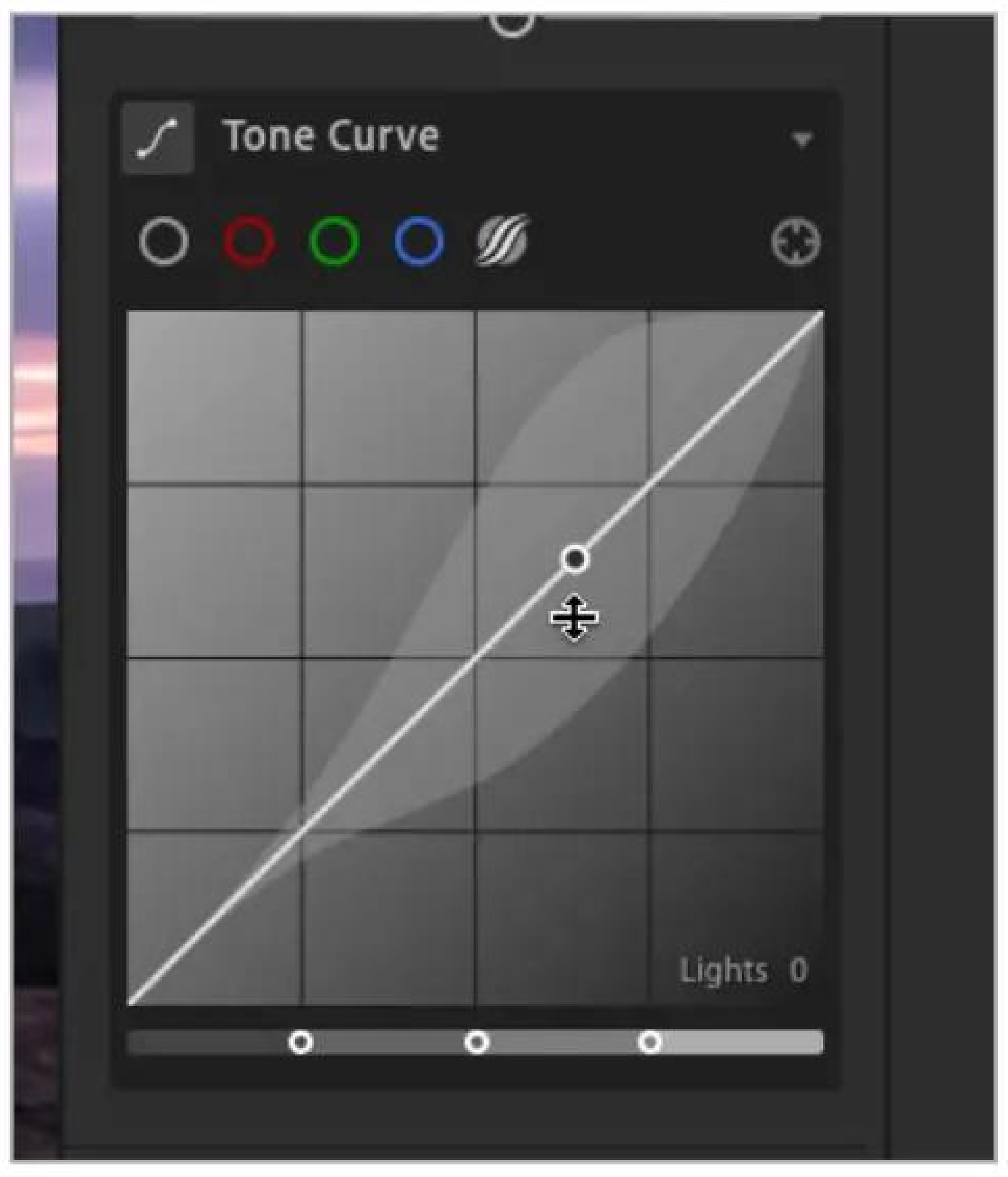
2 The 'example 2.NEF' file will be imported to Lightroom. In the top right corner of your workspace, click on the Add 1 Photo button to add the image to your current library. You have the option of importing to any of the named libraries you may have created. You can view your most recently added images under the Recently Added tab.


Thu 20 Jan 12:24:33
Edit
E
Edit
Presets
Auto
B&W
Profile Adobe Color
Light
Back
Profile
Favorites
Adobe Color
Adobe Monochro...
Adobe Landscape
Adobe Portrait

3 Ranged down the right side of the screen are the all the main tools for processing your photos. Click on the Edit icon (E) to open the image editing tools. The Profile panel allows you to add a number of preset colour and filter effects to your image. These effects can be added on top of any processing adjustments you may have made yourself.

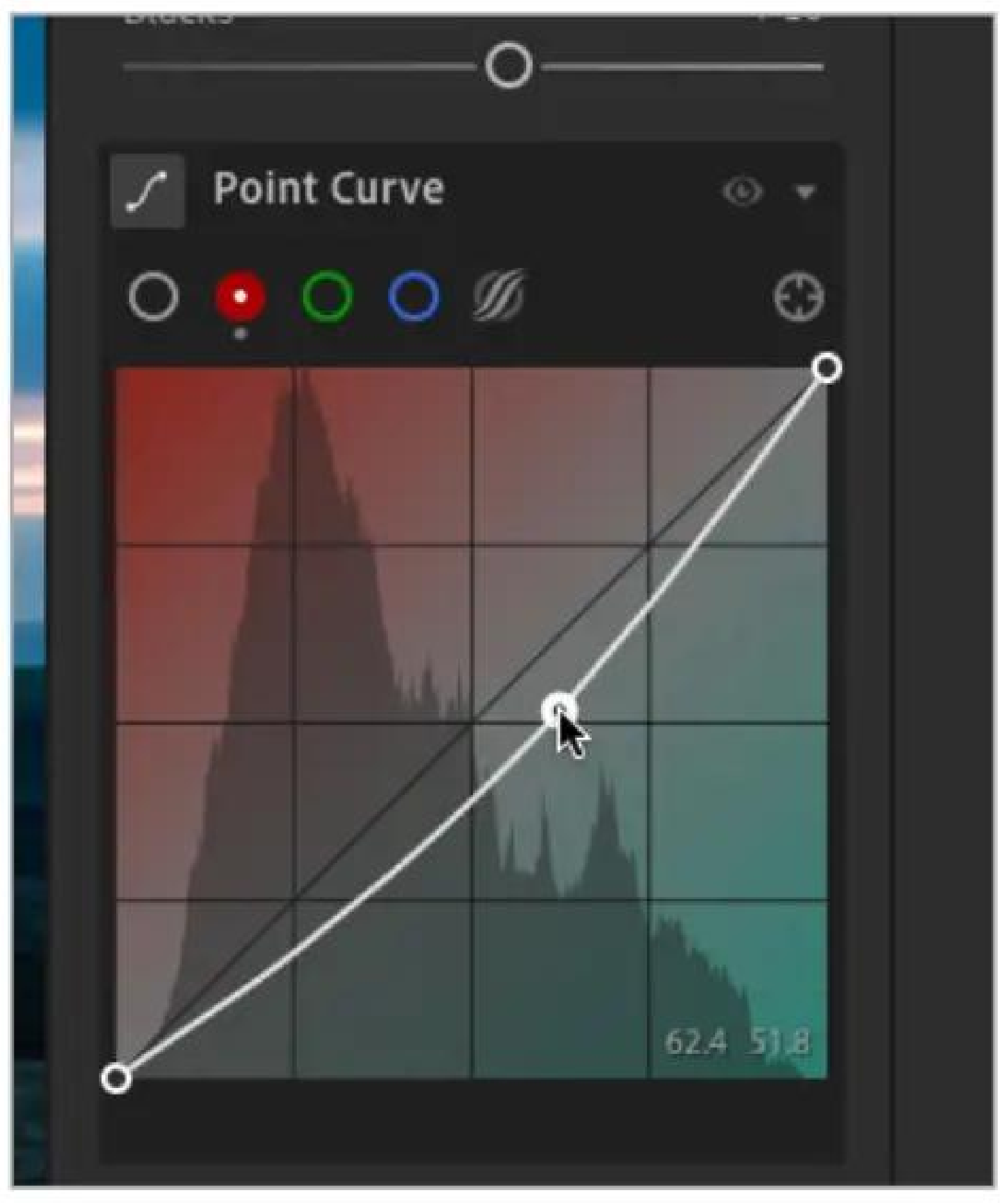

Profile Adobe Color
Light
Exposure 0
Contrast 0
Highlights 0
Shadows 0
Whites 0
Blacks 0
Tone Curve
Profile Adobe Color
Light
Exposure + 0.45
Contrast + 10
Highlights − 70
Shadows + 50
Whites 0
Blacks + 10
Tone Curve

4 Beneath Profile you will find the Light panel. This panel contains all of the main Exposure and Contrast sliders for making basic adjustments to your image. We adjusted the image to brighten it but retained detail in both highlight areas and shadows. You can adjust all the sliders to get the image looking precisely how you want it.



Tone Curve

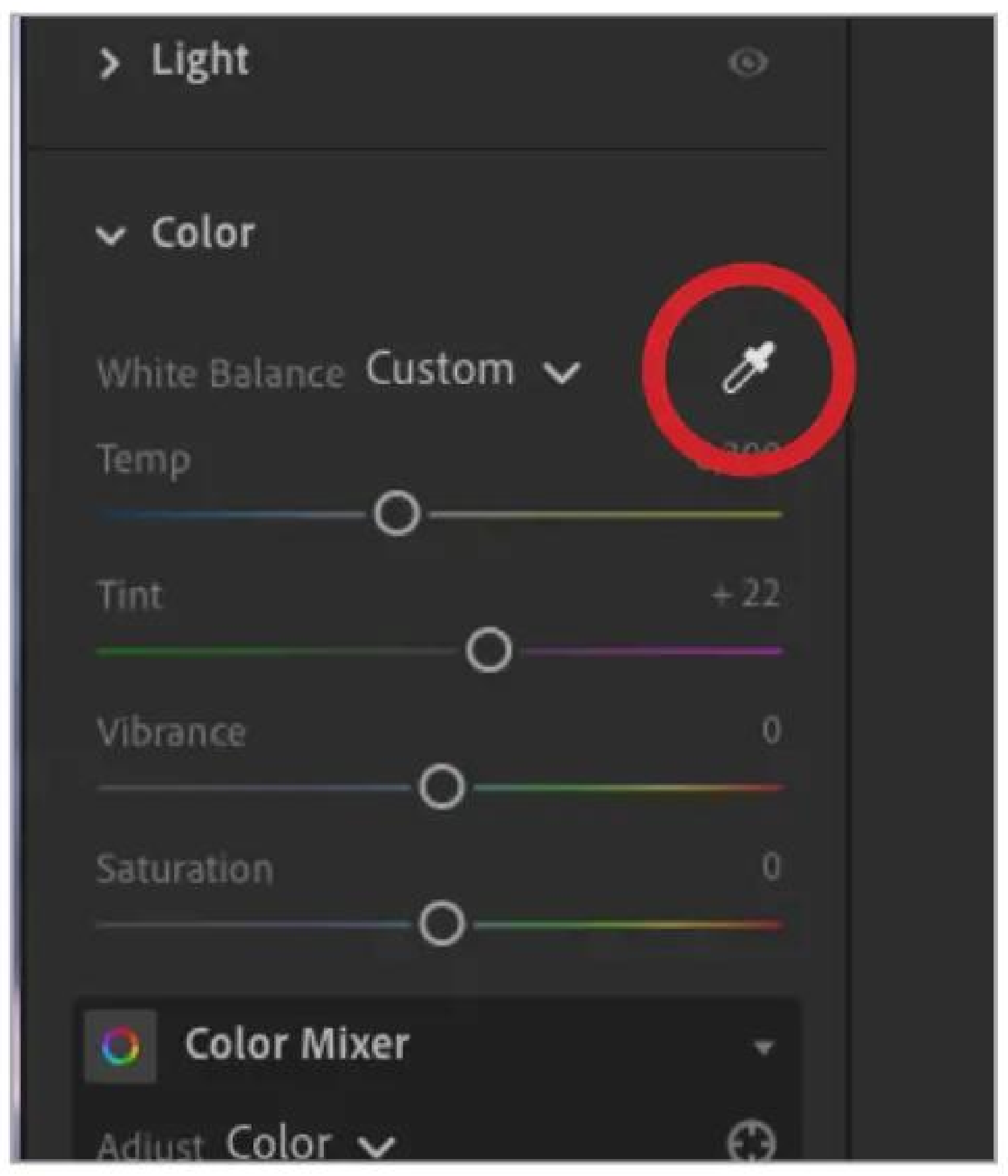
Lights 0



Point Curve

62.4 51.8

5 You also have the option to use the Tone Curve tool. The Tone Curve tool works in much the same way as it does in Photoshop. Dragging a point on the curve alters Shadow, Dark, Light and Highlight values. You can also affect the values of the individual colour channels of Red, Blue and Green by clicking on the red, green or blue Edit Channel buttons.



Light

Color

White Balance Custom

Temp

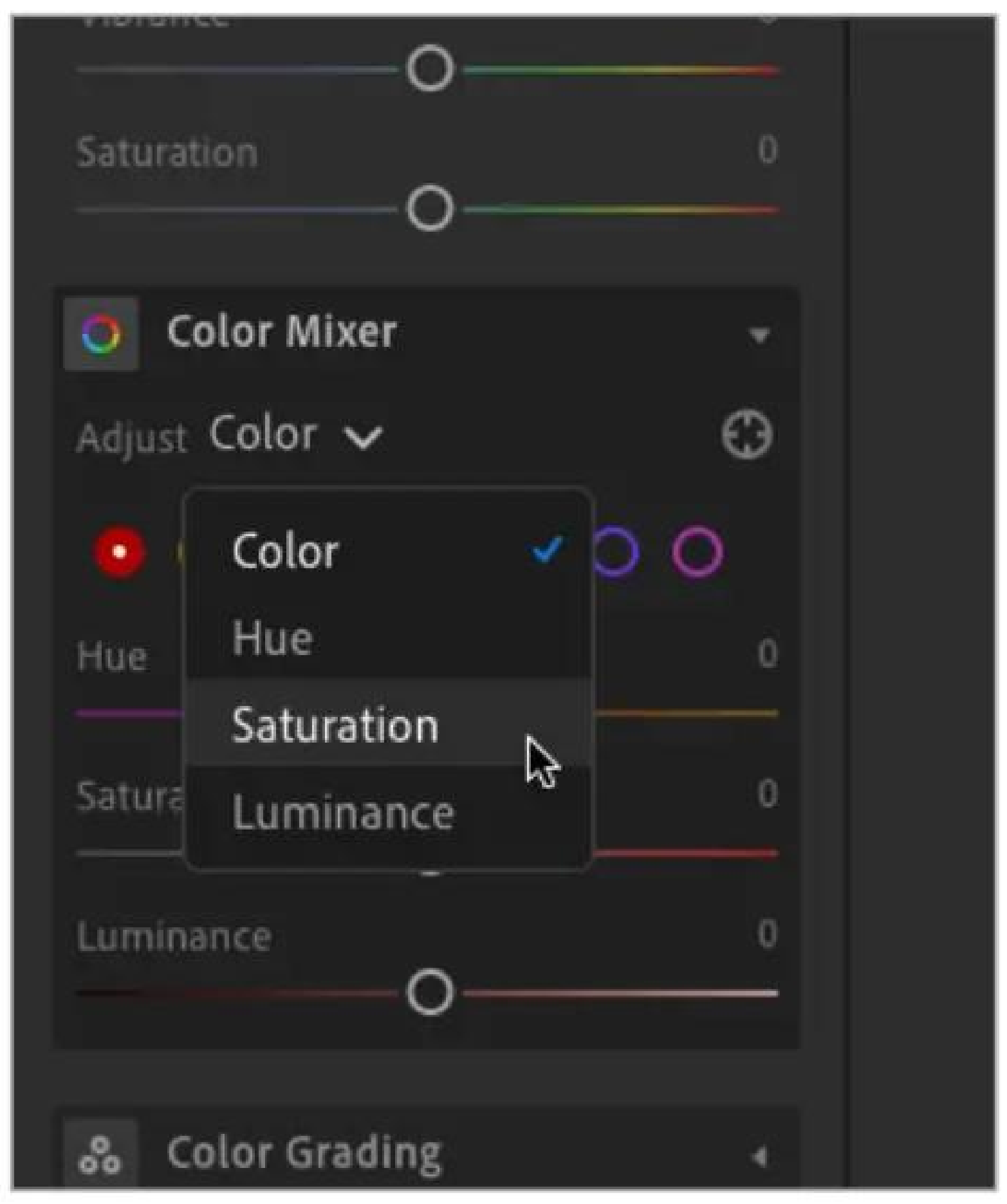
Tint +22

Vibrance 0

Saturation 0

Color Mixer

Adjust Color



Saturation 0

Color Mixer

Adjust Color

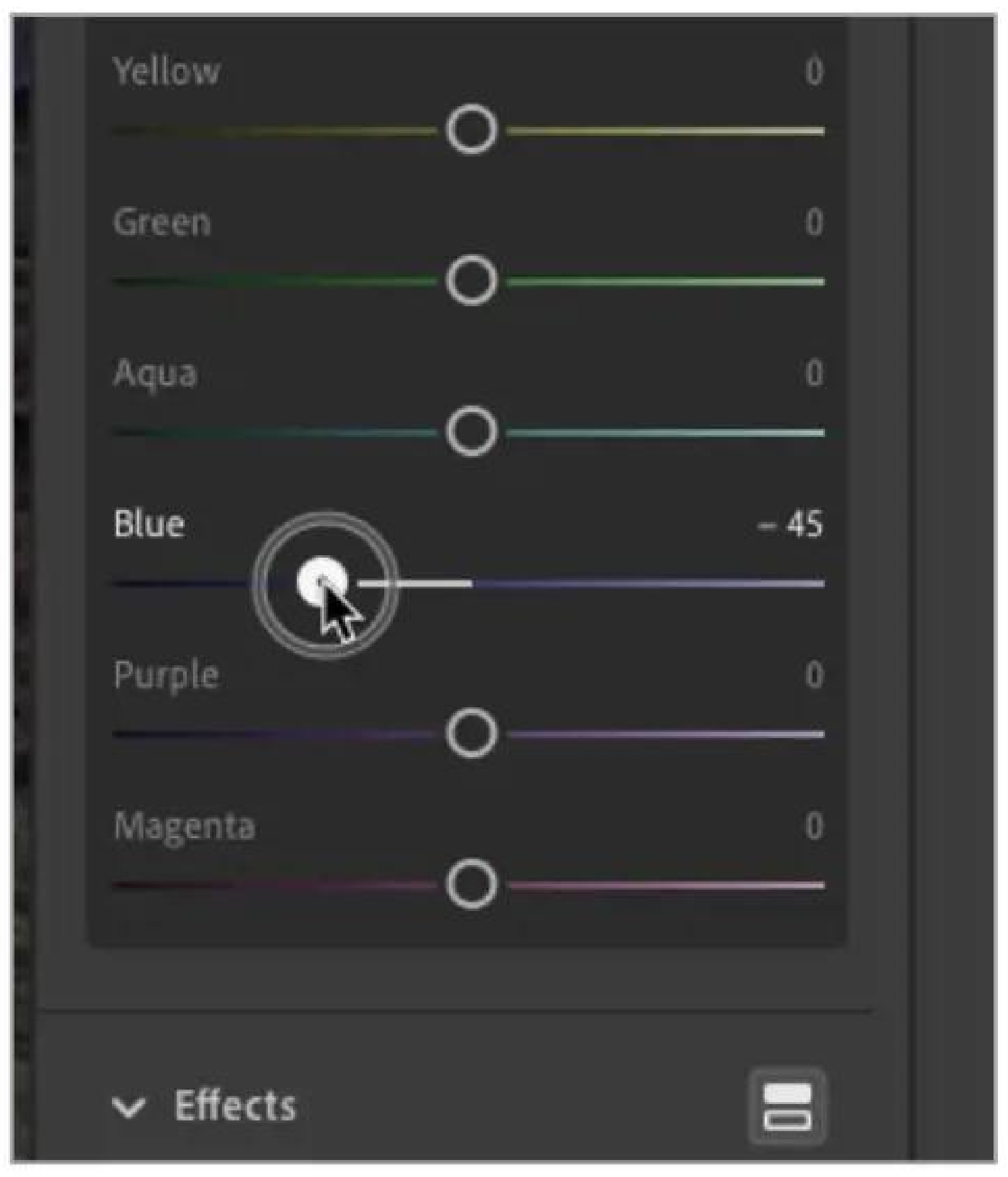
Hue 0

Satura 0

Luminance 0

Color Grading

6 Below the Light panel comes the Color panel. Here you can alter White Balance manually by adjusting the Temp, Tint, Vibrance and Saturation sliders or by using the White Balance Selector (W). You can also use the Colour Mixer and alter the Hue, Saturation and Luminance values to the primary colours to achieve the desired look in your shot.



Yellow 0

Green 0

Aqua 0

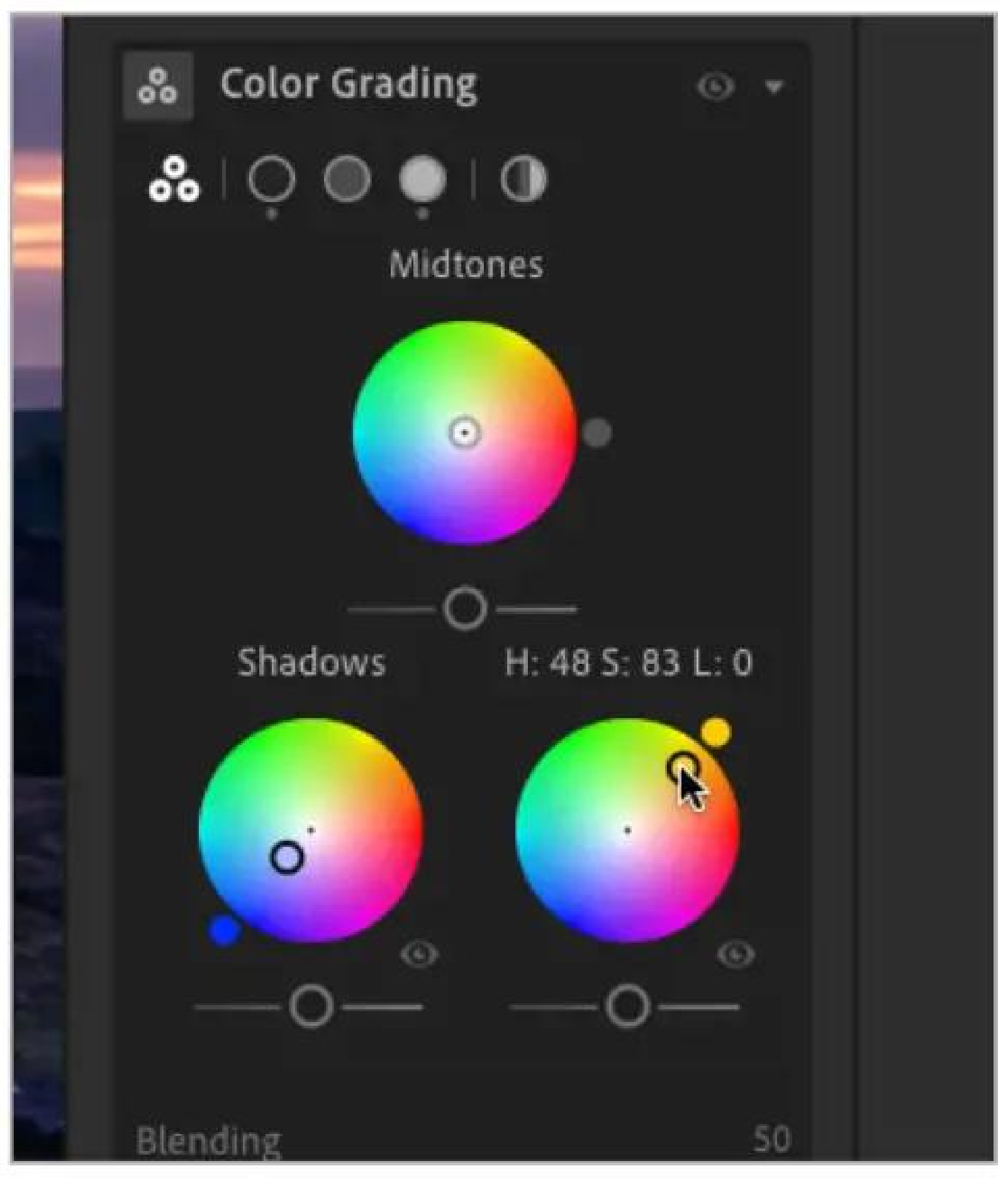
Blue −45

Purple 0

Magenta 0

Effects

7 You can use the Colour Mixer tool in various ways. You can choose to just alter the Hue of the primary colours, adjust the Saturation of each primary colour or make each primary colour lighter or darker. For our workflow example, we altered the Blues Luminance to make them much stronger and more vibrant.



Color Grading

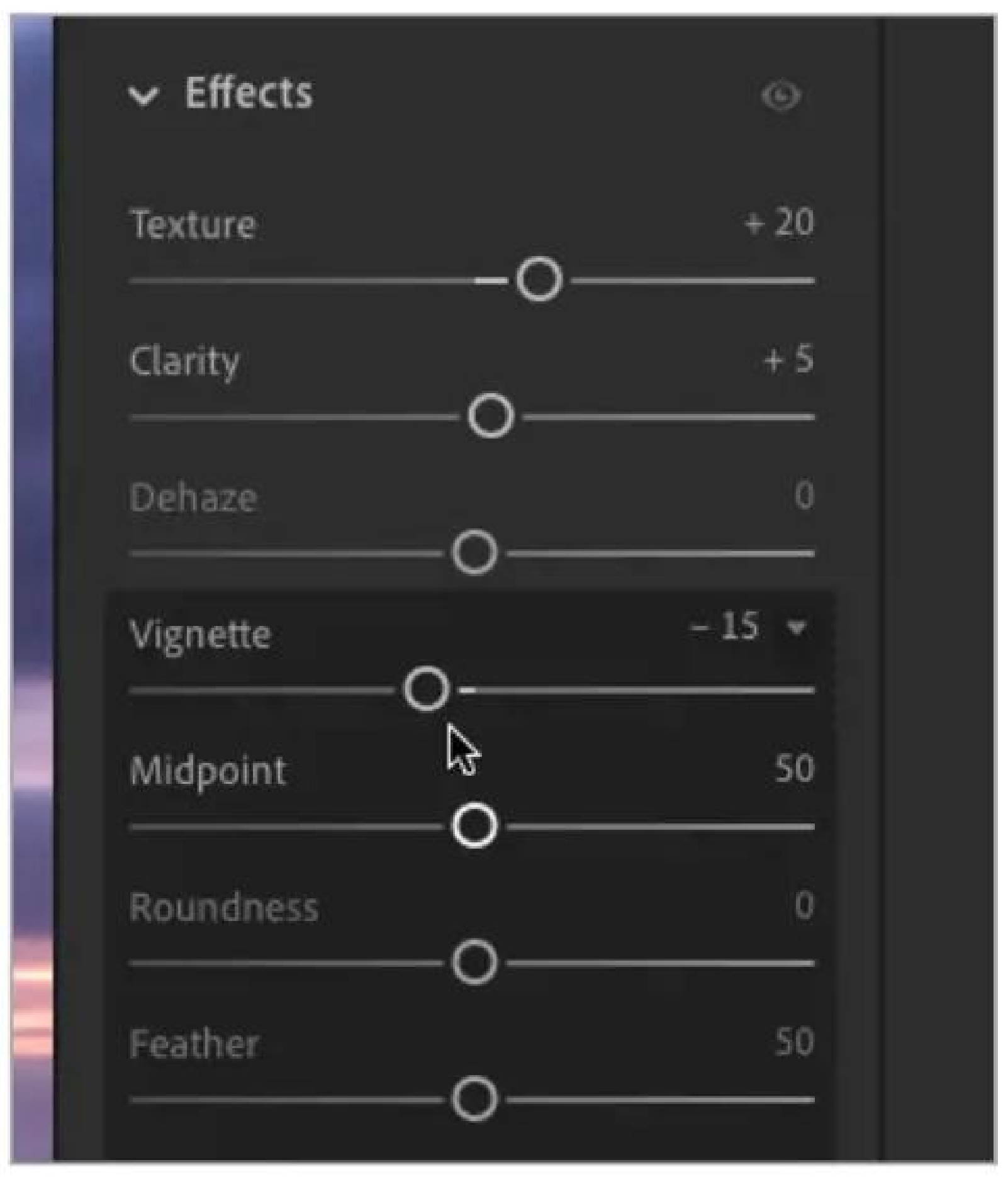
Midtones

Shadows

H: 48 S: 83 L: 0

Blending 50

8 Color Grading is a colour control method that lets you add a colour tint to highlight, mid-tone and shadow areas in your image. You can choose the colour, strength and balance of colours between bright and dark areas by using the colour wheel tools. For example, you can add blue to the shadow areas and then add yellow to the highlights of your image.



Effects

Texture +20

Clarity +5

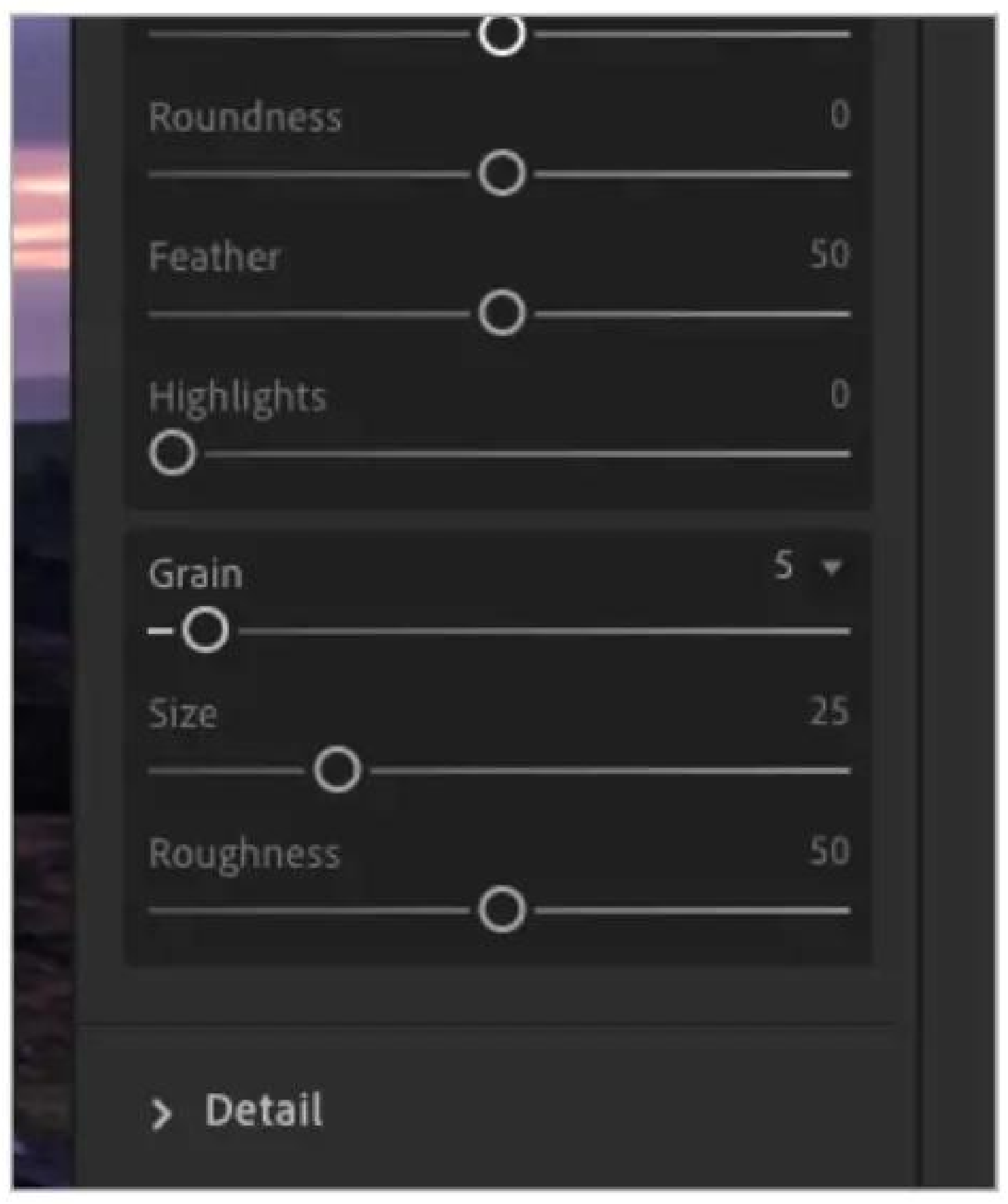
Dehaze 0

Vignette −15

Midpoint 50

Roundness 0

Feather 50



Roundness 0

Feather 50

Highlights 0

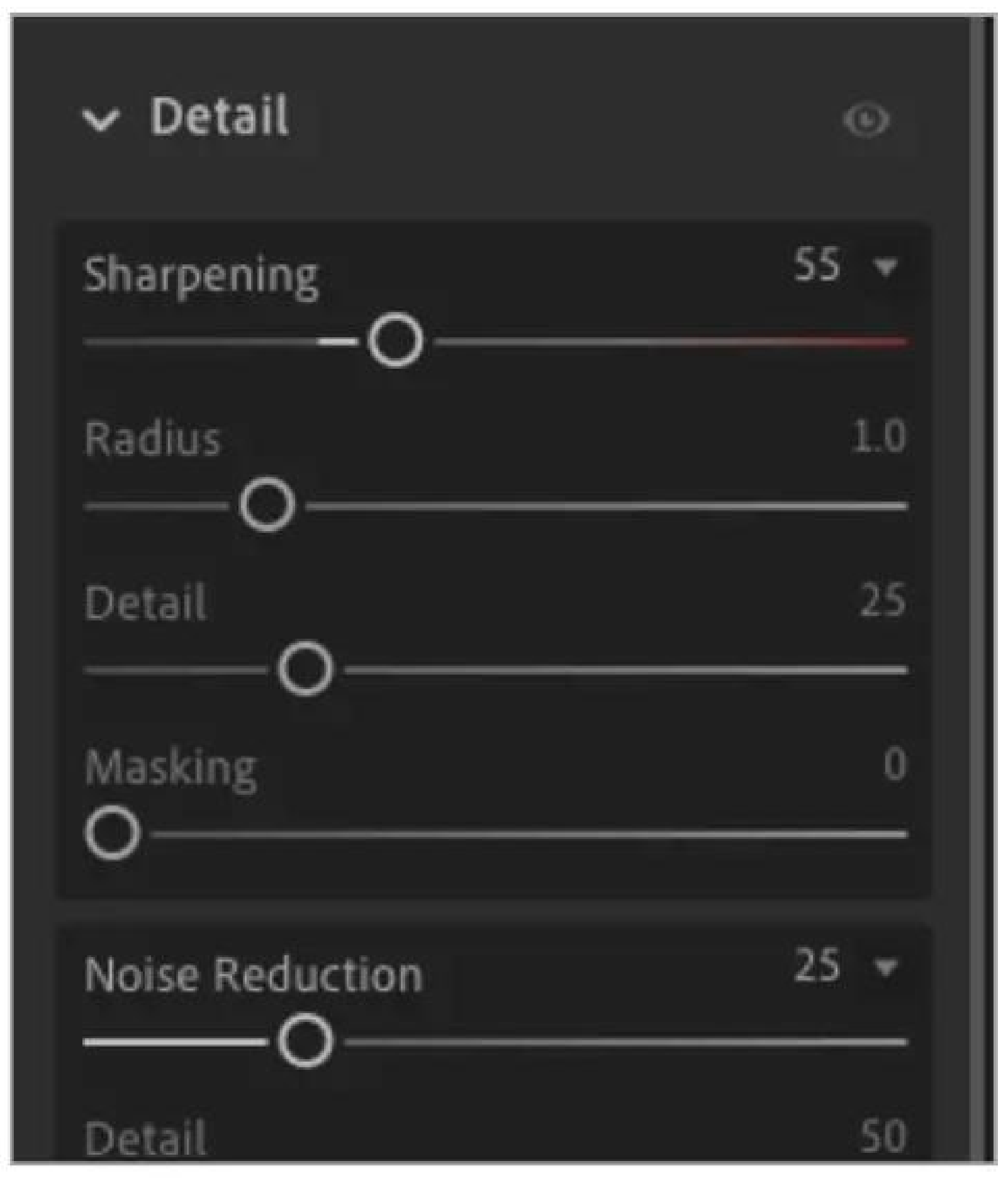
Grain 5

Size 25

Roughness 50

Detail

9 Next you can open up the Effects panel. This contains the Clarity, Dehaze, Vignette and Grain sliders. Clarity and Dehaze help control mid-tone contrast while Vignette gives you a number of ways to darken the image edges. Grain lets you add a film grain effect and choose the size and roughness of the grain you are adding to the image.



Detail

Sharpening 55

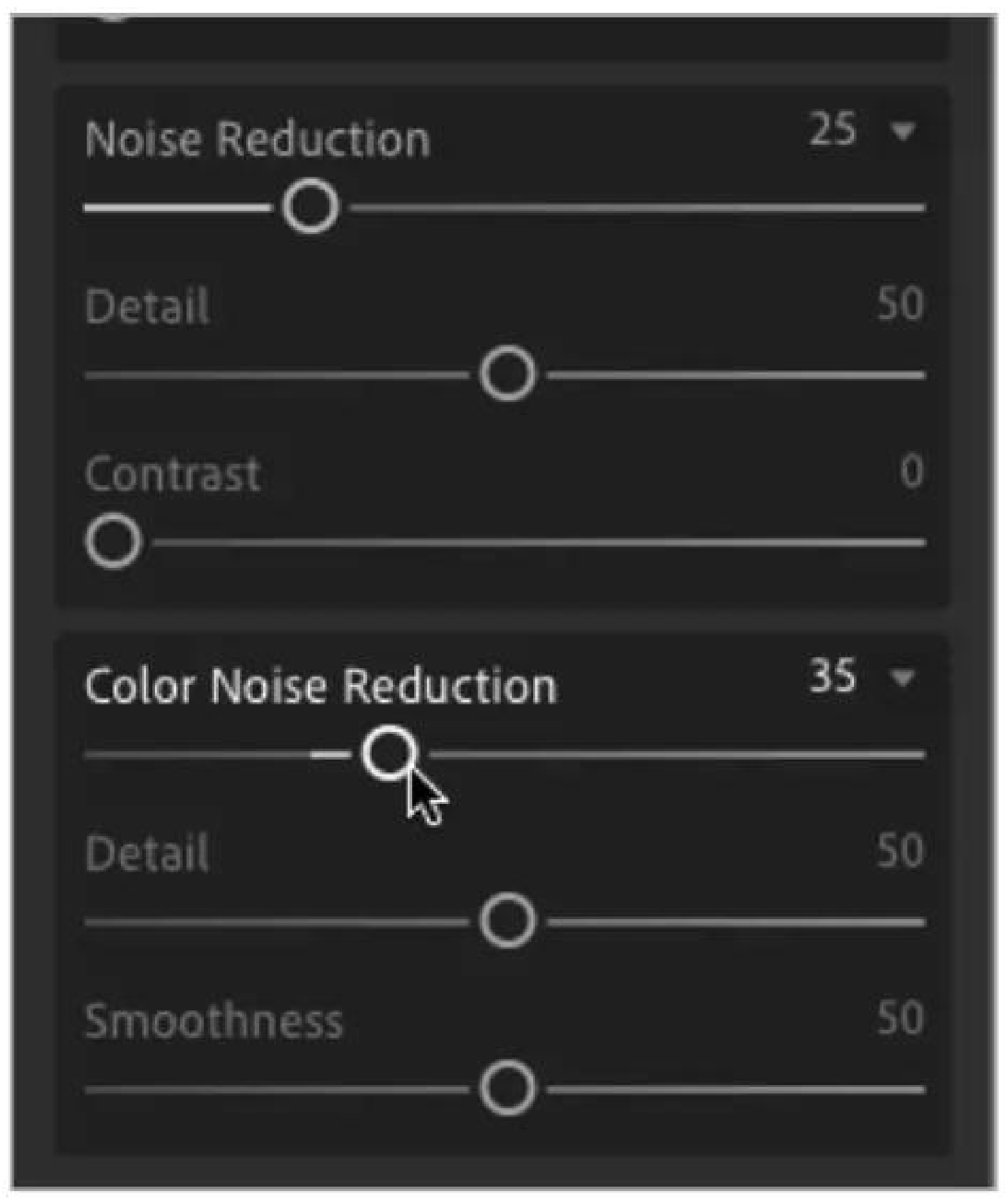
Radius 1.0

Detail 25

Masking 0

Noise Reduction 25

Detail 50



Noise Reduction 25

Detail 50

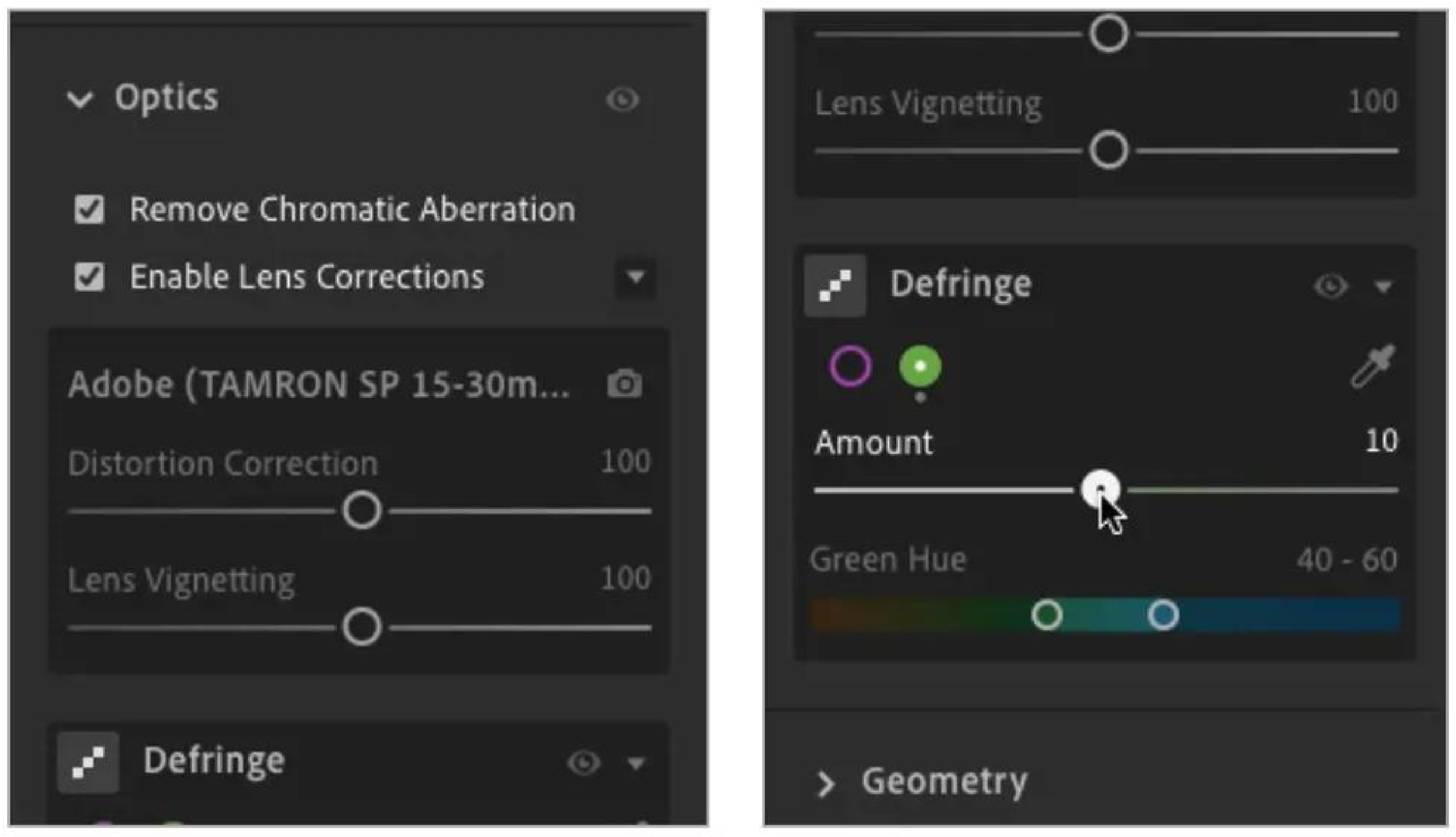
Contrast 0

Color Noise Reduction 35

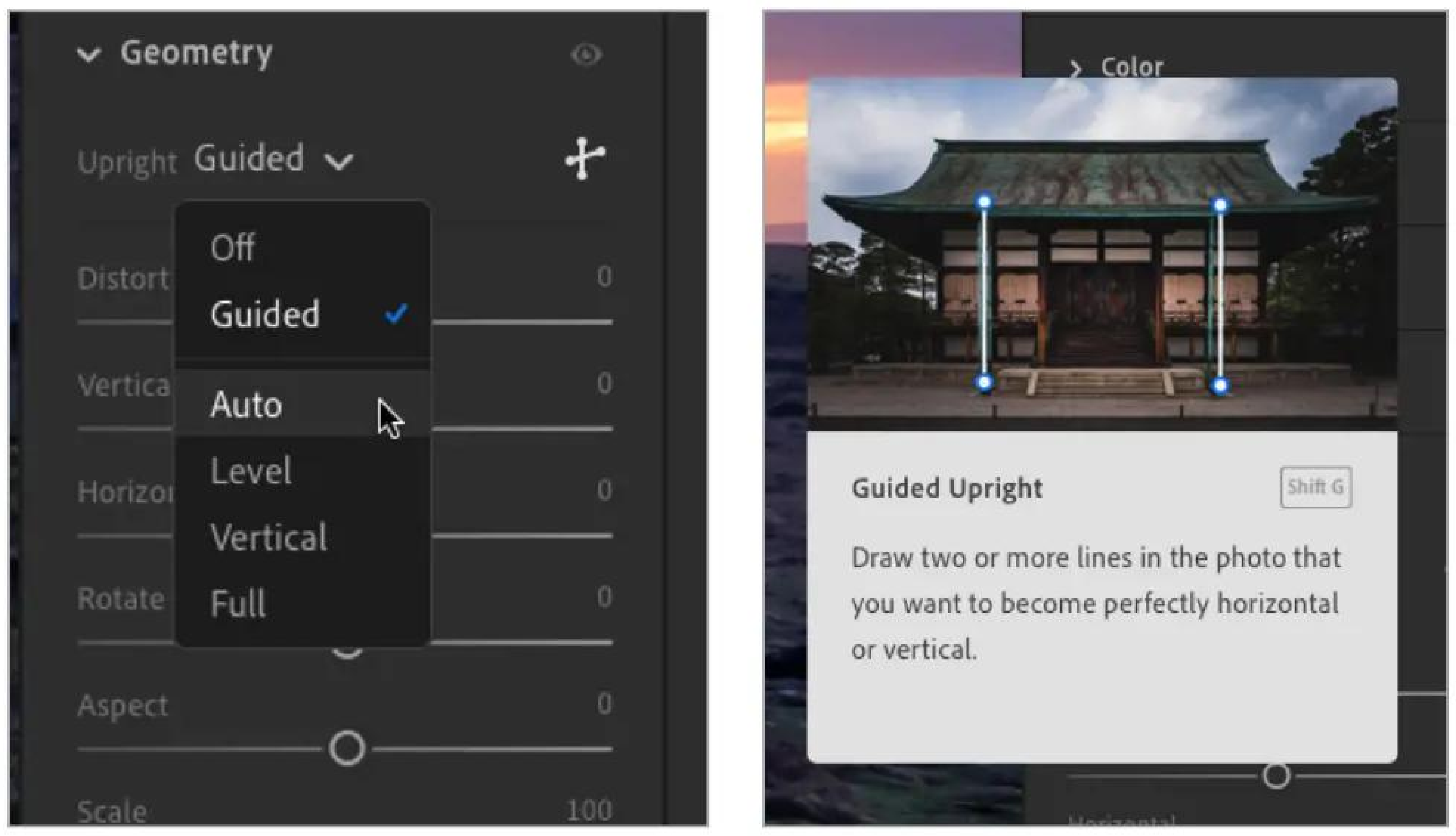
Detail 50

Smoothness 50

10 The next panel contains Detail adjustments. This is where you can control Sharpening in your image by using the Radius, Detail and Masking sliders as well as using the adjustment sliders for Noise Reduction and Colour Noise Reduction. It is highly recommended that you work with your image at 1:1 magnification to clearly see their effects.

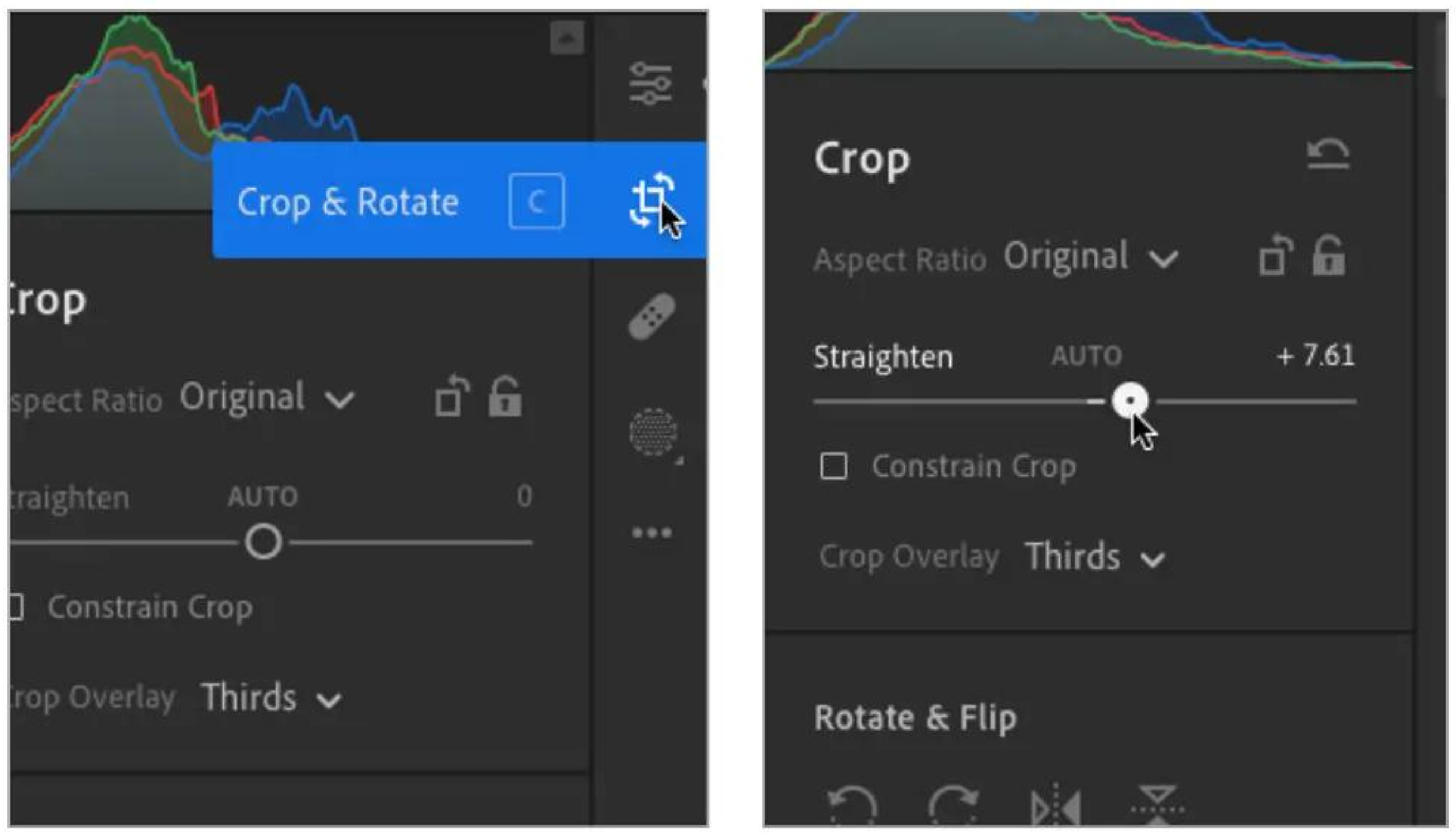

Optics
☑ Remove Chromatic Aberration
☑ Enable Lens Corrections
Adobe (TAMRON SP 15-30m...
Distortion Correction 100
Lens Vignetting 100
Defringe
Lens Vignetting 100
Defringe
Amount 10
Green Hue 40 - 60
Geometry

11 Below the Detail panels comes Optics. Clicking on the Remove Chromatic Aberration and Enable Lens Corrections buttons identifies which lens was used and then removes colour aberrations plus any distortion created by that lens. You can also use the Defringe controls to manually apply an amount of Defringe to any purple and green fringing in the shot.

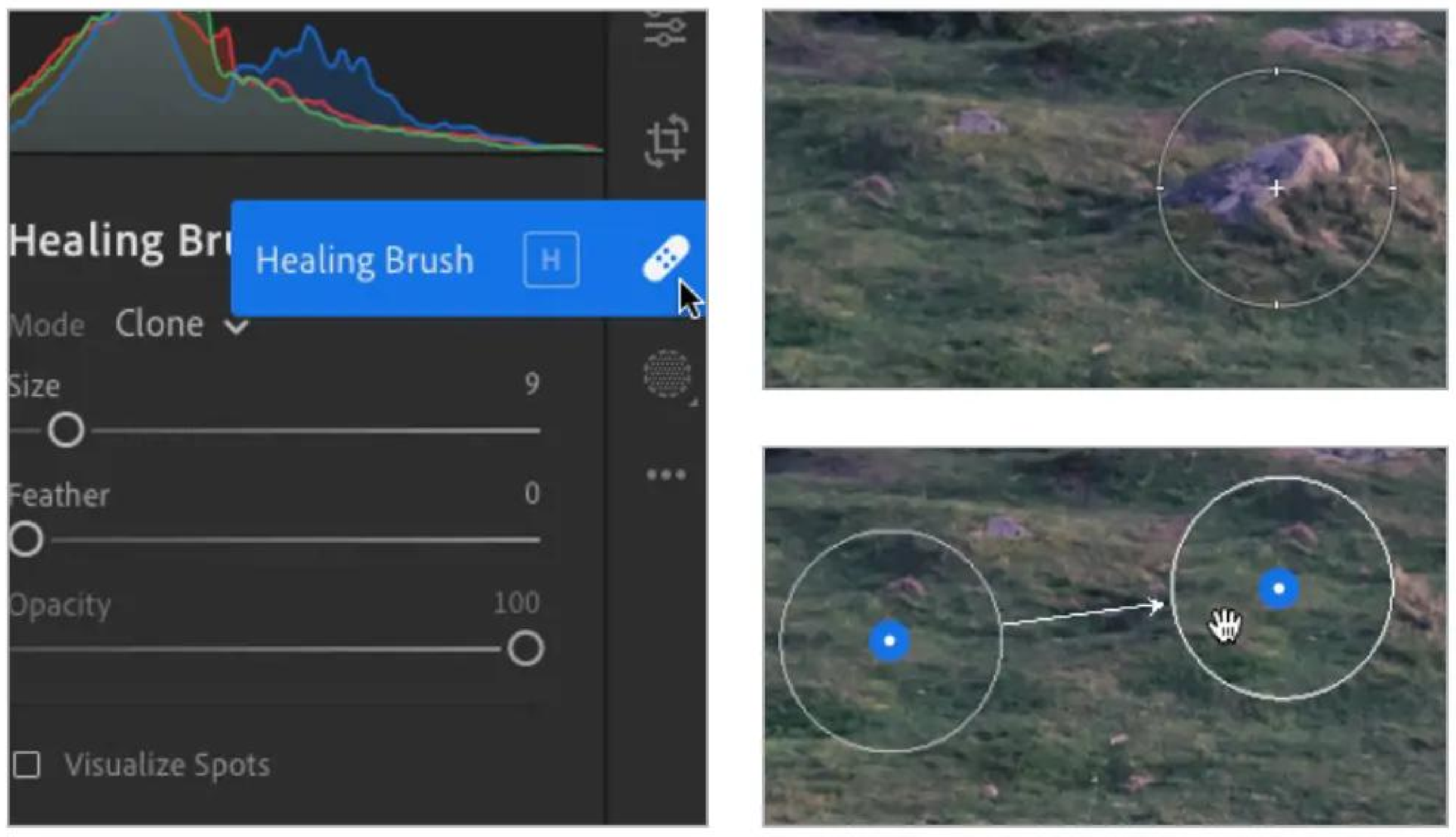

Geometry
Upright Guided
Off
Guided
Auto
Level
Vertical
Full
Distort 0
Vertica 0
Horizo 0
Rotate 0
Aspect 0
Scale 100
Color
Guided Upright
Shift G
Horizontal

Draw two or more lines in the photo that you want to become perfectly horizontal or vertical.

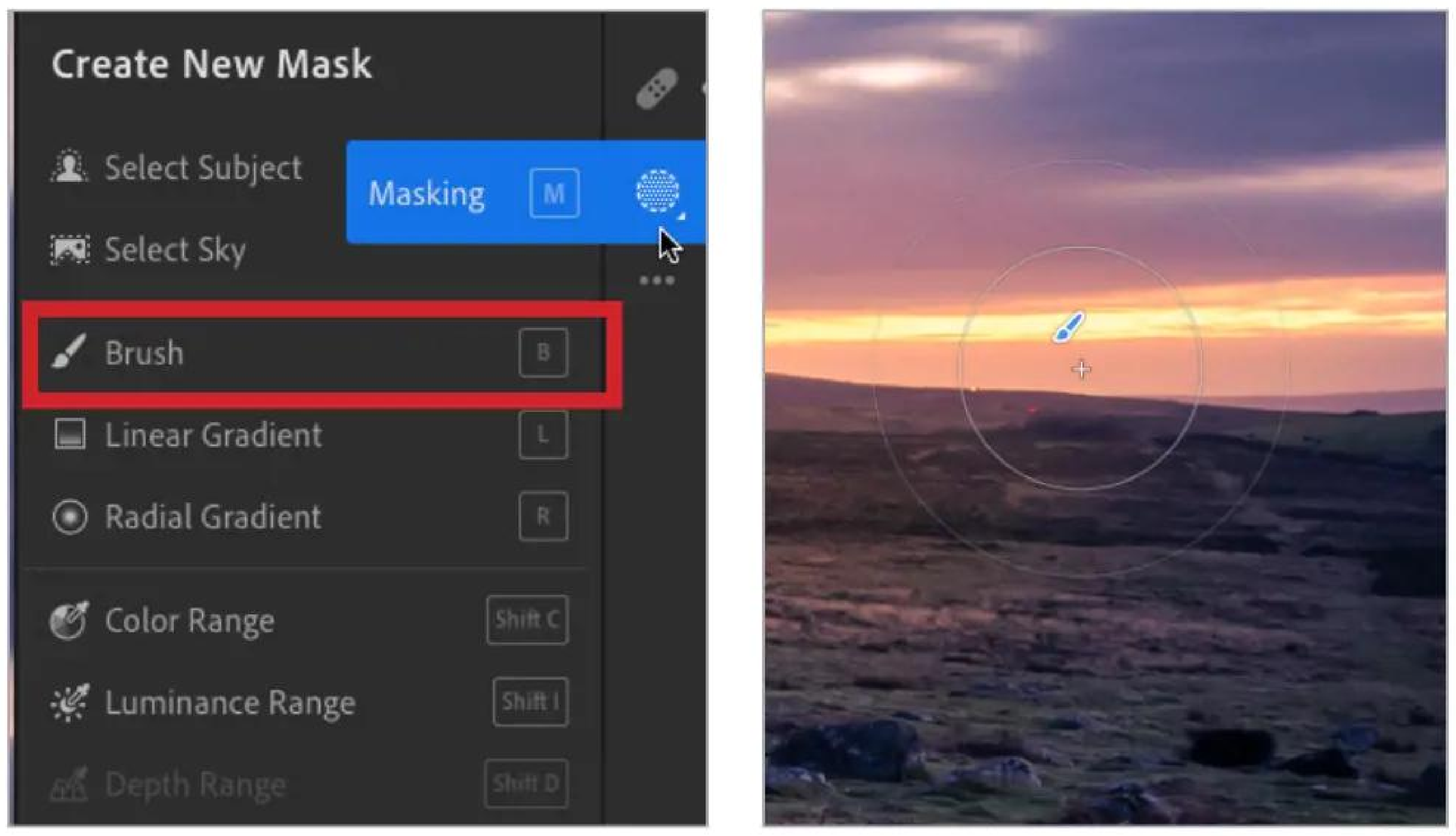
12 The last panel is Geometry, where you can physically alter the shape, size and rotation of the image. It is particularly useful for removing unwanted perspective and converging verticals in architectural shots. You can choose to alter the geometry of the image using the presets or use the Guided Upright tool to adjust what is level and vertical.


Crop & Rotate C
rop
spect Ratio Original
traighten AUTO 0
☐ Constrain Crop
rop Overlay Thirds
Crop
Aspect Ratio Original
Straighten AUTO + 7.61
☐ Constrain Crop
Crop Overlay Thirds
Rotate & Flip

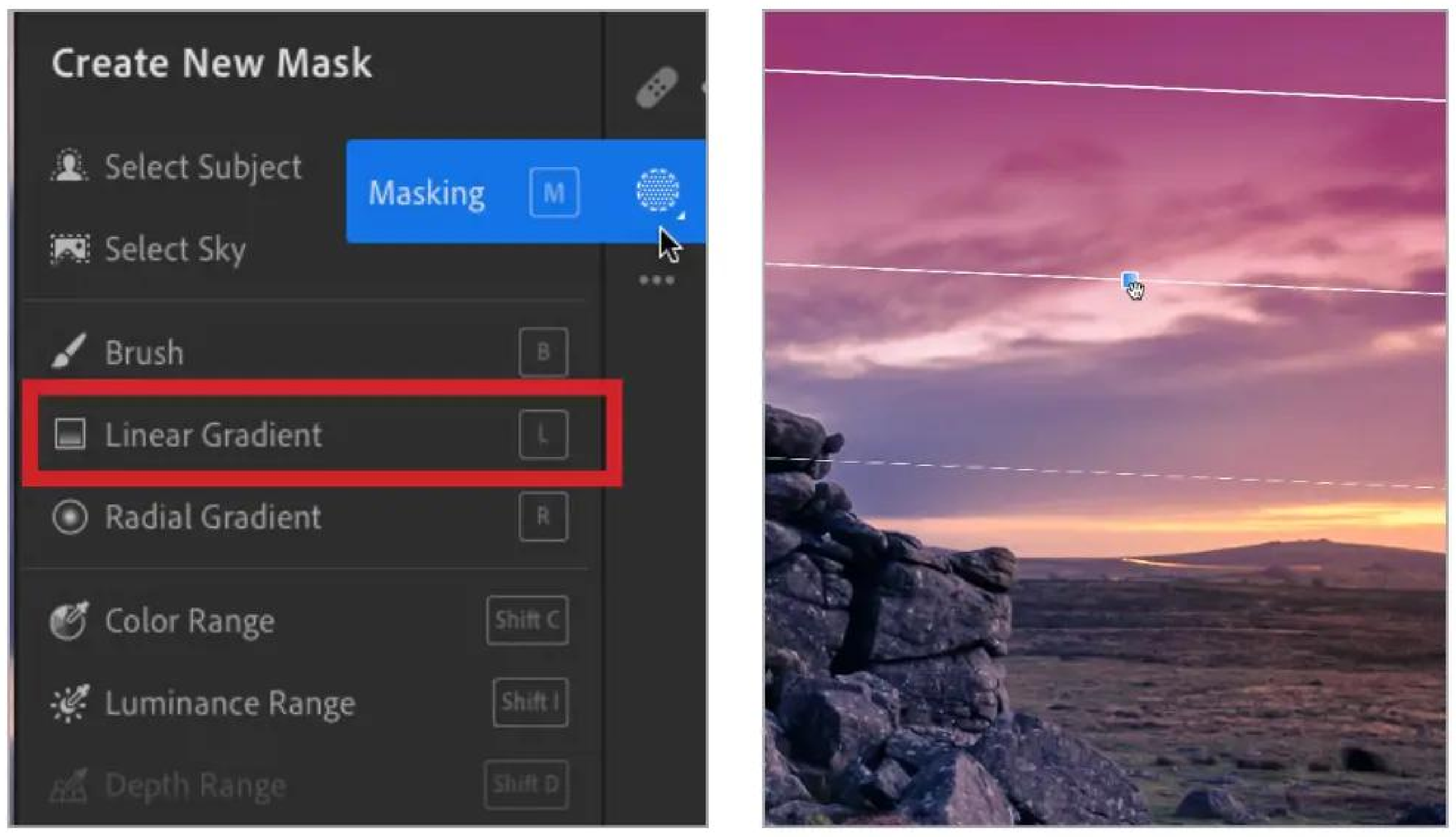
13 Back to the main menu and the next tool is the one for Crop & Rotate (C). You can crop your images manually or choose a preset from a number of popular image aspect ratios. The Crop & Rotate feature also allows you to rotate and flip your images by using the provided slider. You can also Constrain Crop the proportion of the crop once you've set it.


Healing Bru
Healing Brush H
Mode Clone
Size 9
Feather 0
Opacity 100
☐ Visualize Spots

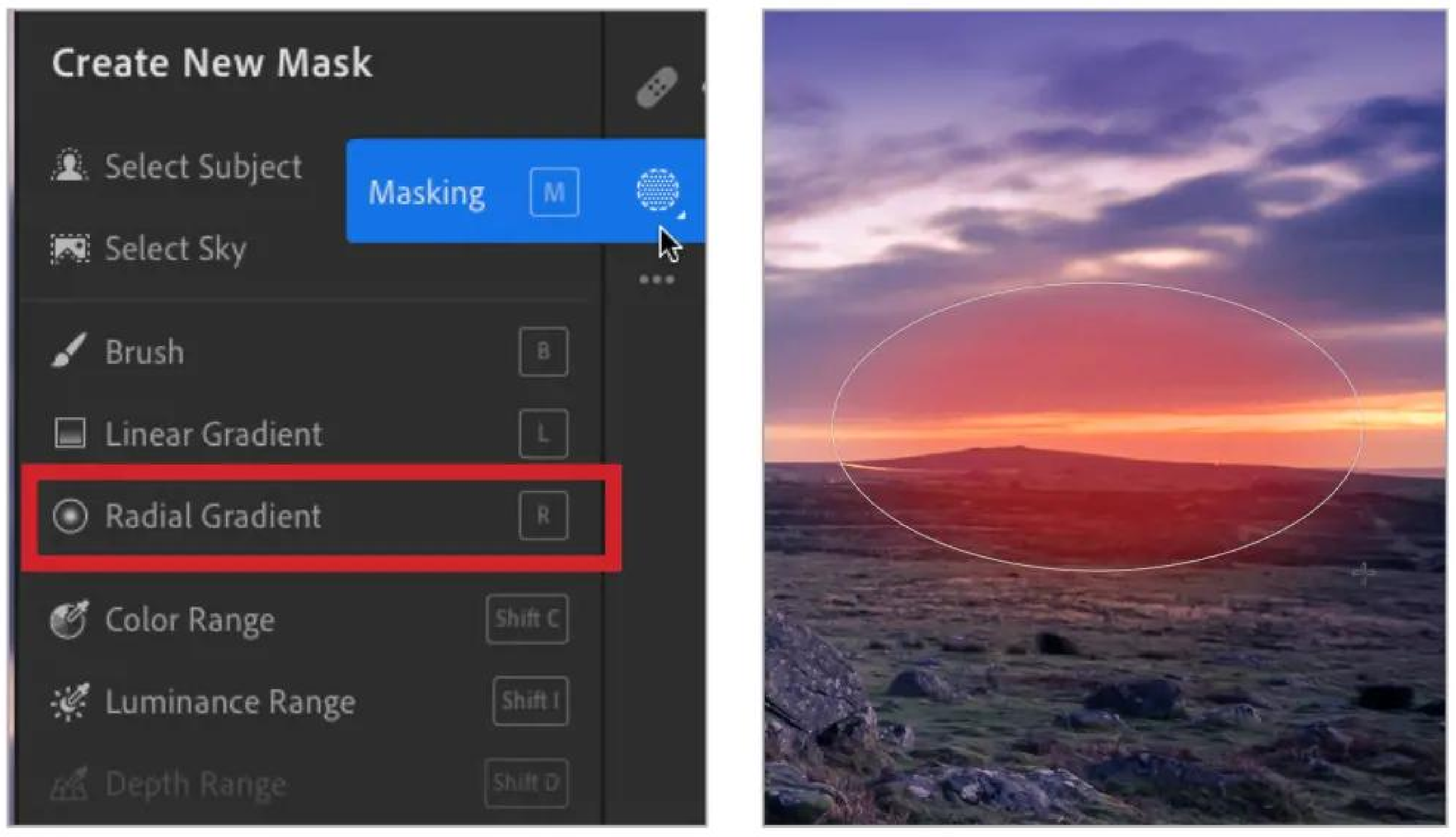
14 The Healing Brush tool (H) is useful for removing any unwanted objects and dust or dirt from your photo. Simply choose the Clone or Heal mode and brush over your target. It will then use nearby image data to remove the unwanted item. You can choose the Size, Feather and Opacity of the brush and click Visualize Spots to help you see any offending blemishes.


Create New Mask
Select Subject
Select Sky
Masking M
Brush B
Linear Gradient L
Radial Gradient R
Color Range Shift C
Luminance Range Shift I
Depth Range Shift D

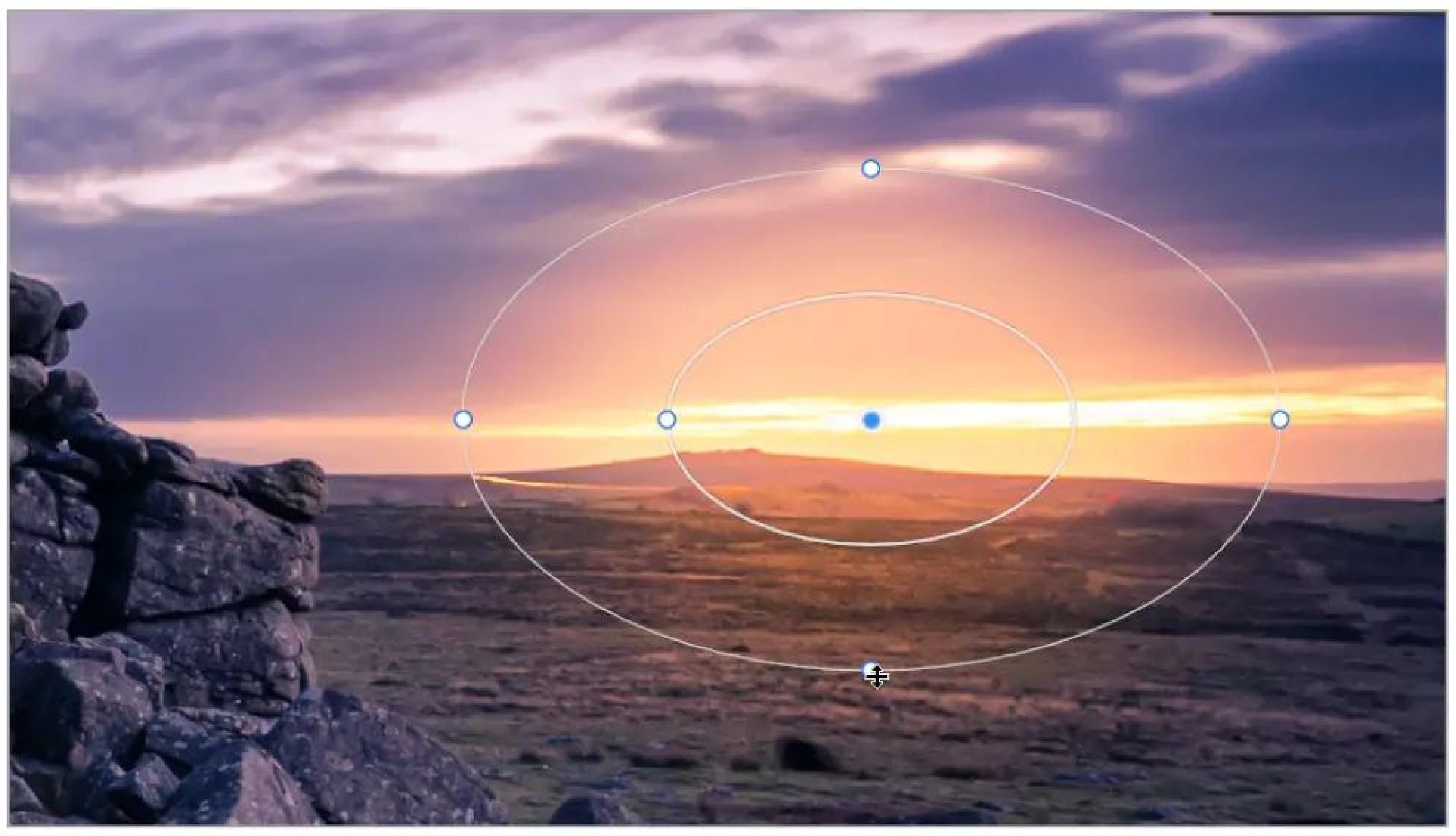
15 The new Masking tool (B) is next. You can use it to automatically Select Sky or Subject like you can in Photoshop, or use the more familiar Brush, Linear and Radial adjustments from previous versions of Lightroom. In this example, we used the Brush tool to select an area of sky and used the available adjustment tools to add warmer colours.


Create New Mask
Select Subject
Select Sky
Masking M
Brush B
Linear Gradient L
Radial Gradient R
Color Range Shift C
Luminance Range Shift I
Depth Range Shift D

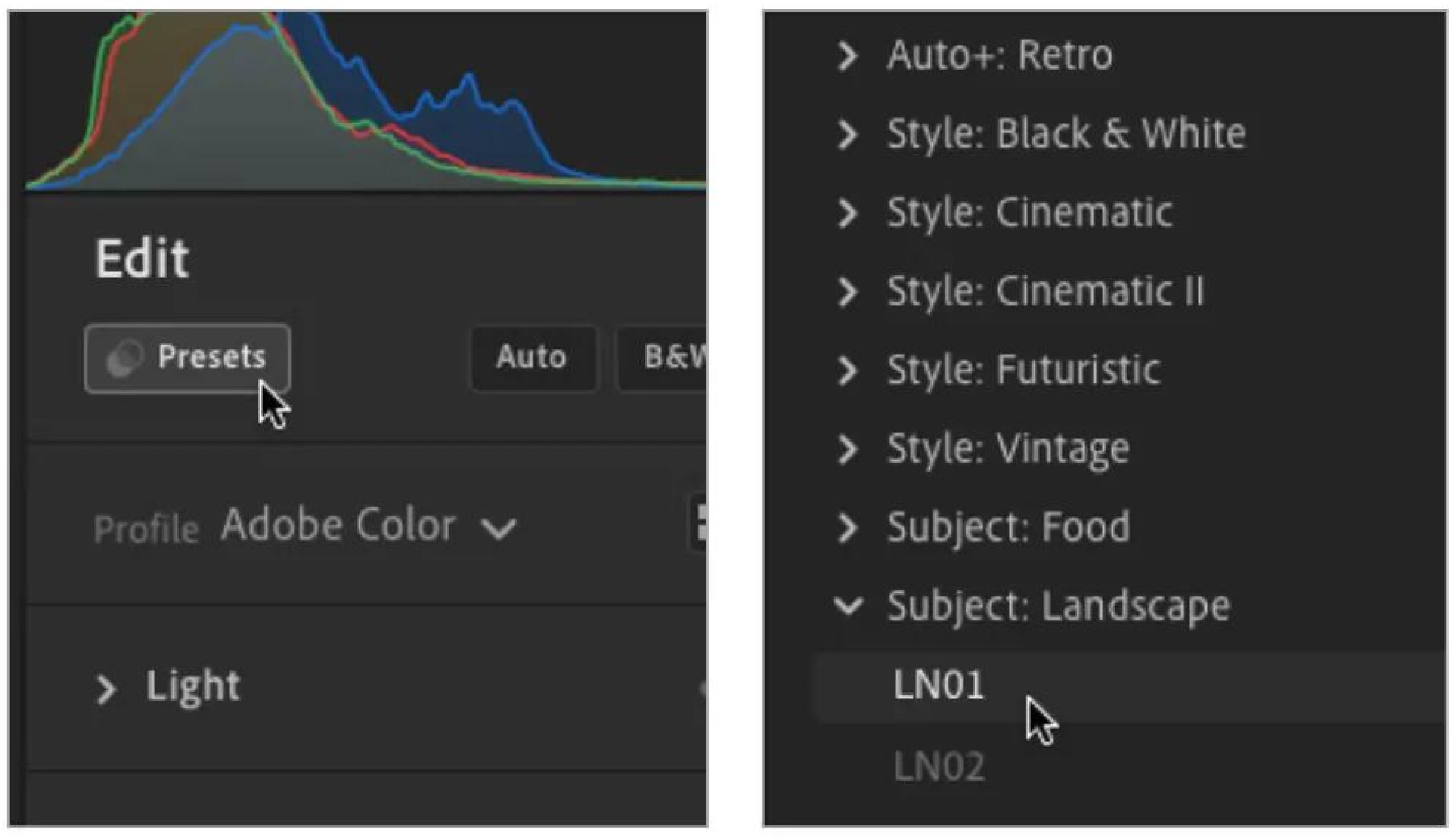
16 Linear Gradient (L) behaves like a digital version of the graduated filters used by photographers on their lenses. You can click and drag a graduated filter across your image, to either darken or lighten areas based on your settings. The effect begins at 100% density at the start point of the gradient and then fades to 0% at the end.


Create New Mask
Select Subject
Select Sky
Masking M
Brush B
Linear Gradient L
Radial Gradient R
Color Range Shift C
Luminance Range Shift L
Depth Range Shift D

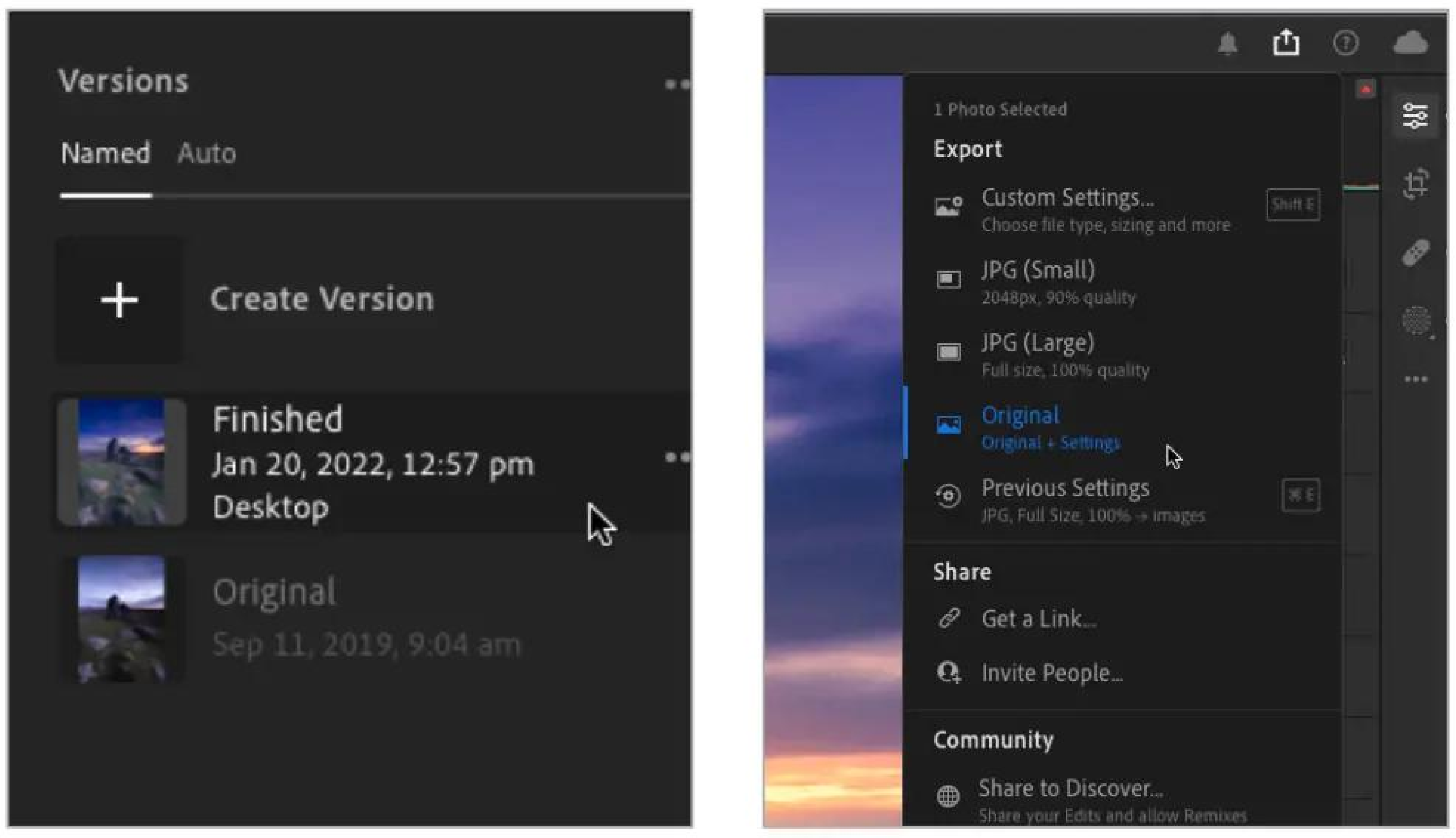
17 The Radial Gradient Tool (R) is a circular version of the Graduated Filter. It can affect anything inside it or be set to only affect anything outside the area selected. We used a bright yellow Radial Filter to create a swathe of warm light across selected parts of the photo. You can add a number of these filters or erase parts of the existing ones.



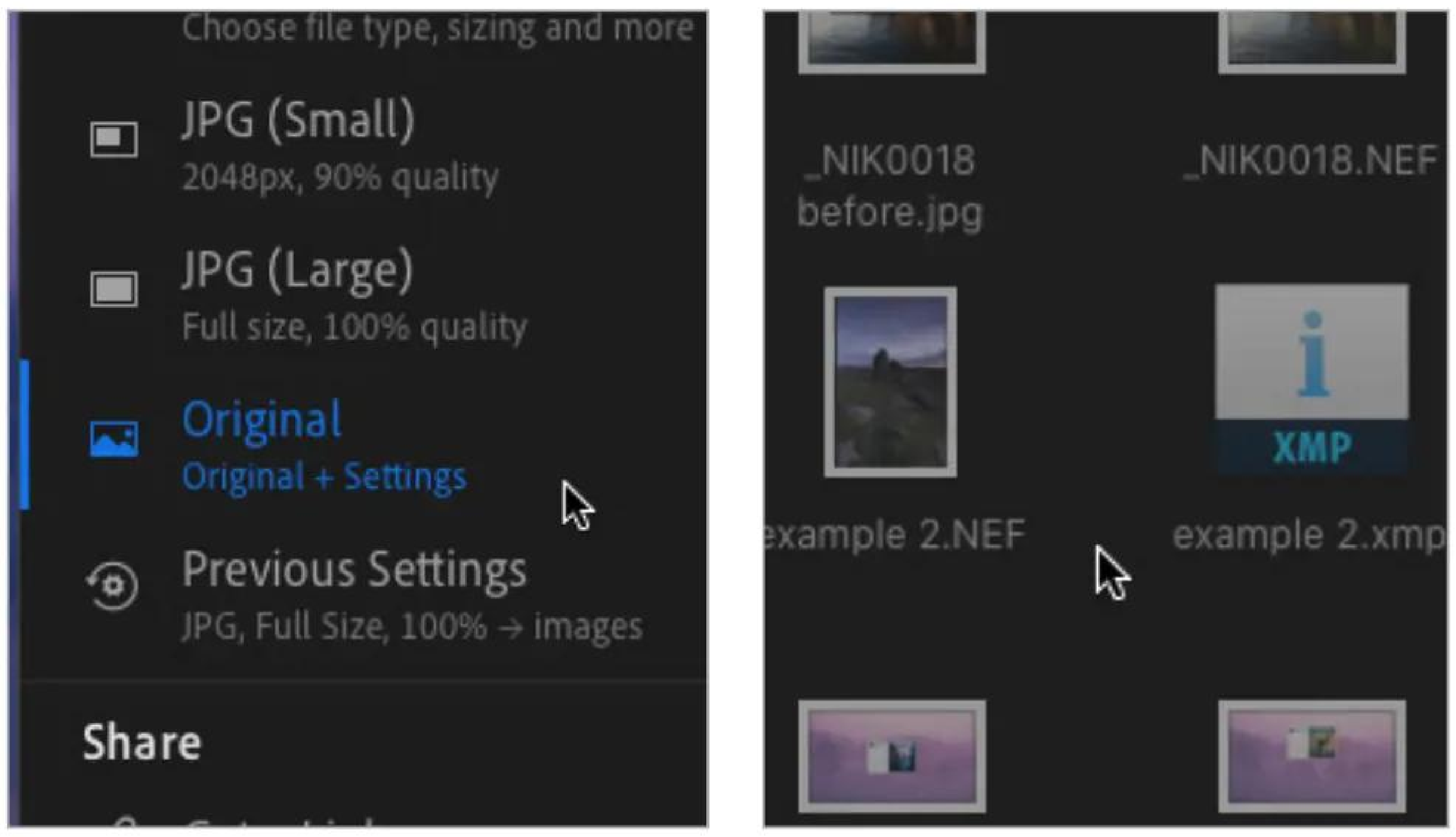
18 You can also alter the proportions of the Radial Filter effect by dragging the control points.. You can also make targeted adjustments to your photos by using the Color Range and Luminance Range tools to select areas by their colour or their brightness. See the front of this manual for more details on the new Masking feature and its suite of masking tools.


Edit
Presets
Auto
B&W
Profile Adobe Color
Light
Auto+: Retro
Style: Black & White
Style: Cinematic
Style: Cinematic II
Style: Futuristic
Style: Vintage
Subject: Food
Subject: Landscape
LN01
LN02

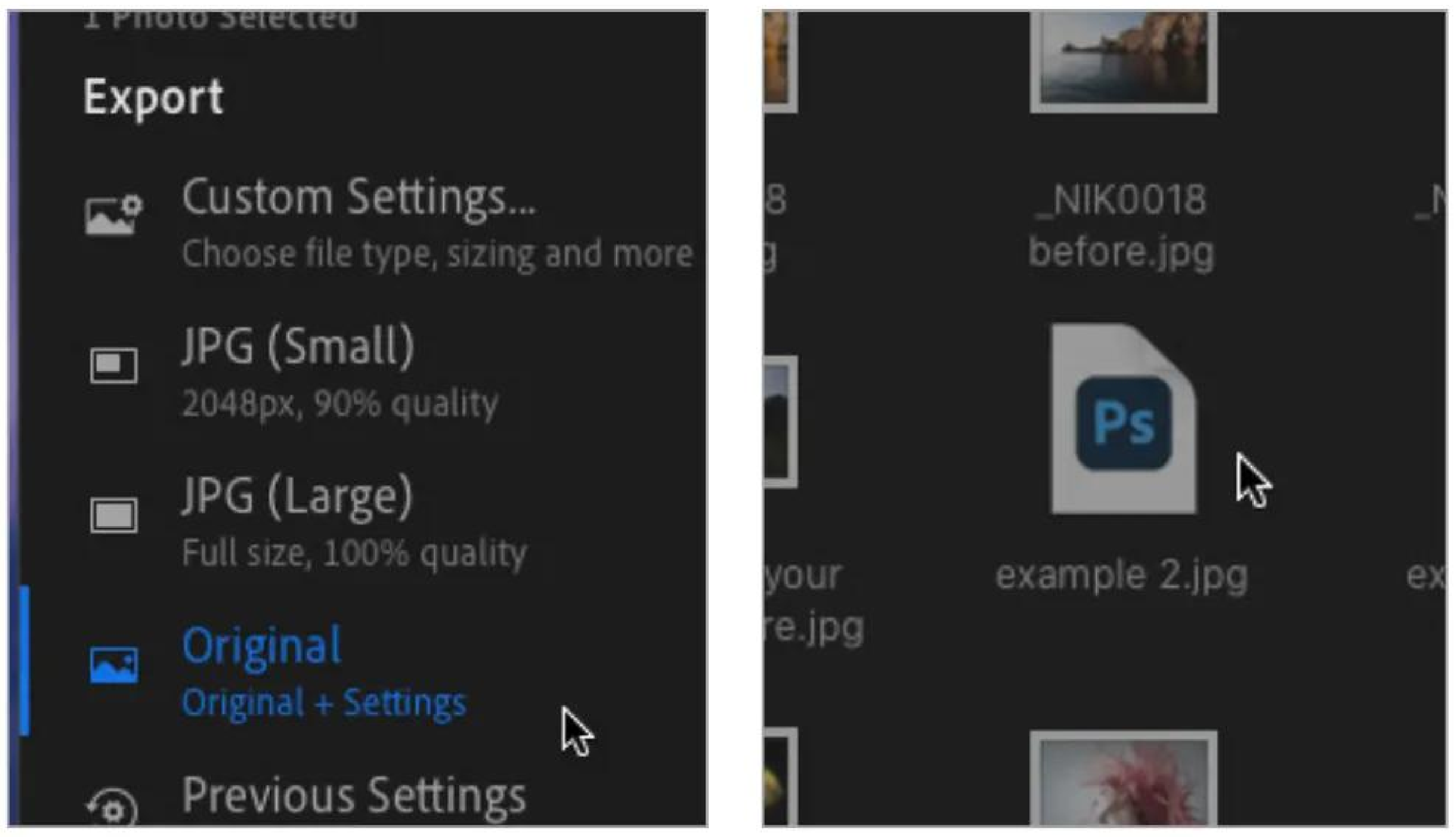
19 Finally, if you click on Presets at the bottom of the toolbar, you can access the full range of filters for a one-click creative effect to dramatically alter your photos. They are presented in thumbnail form and range from Black and White conversions to Aged Photo and even Grain effects. Hover over each one to see the effect on your image in realtime.


Versions
Named
Auto
Create Version
Finished
Jan 20, 2022, 12:57 pm
Desktop
Original
Sep 11, 2019, 9:04 am
1 Photo Selected
Export
Custom Settings...
Choose file type, sizing and more
JPG (Small)
2048px, 90% quality
JPG (Large)
Full size, 100% quality
Original
Original + Settings
Previous Settings
JPG, Full Size, 100% → images
Share
Get a Link...
Invite People...
Community
Share to Discover...
Share your Edits and allow Remixes

20 While you work on your image, you have the option to save snapshots of your progress. Click the Versions button in the lower right of the workspace and then add versions as you go. You can also have it save automatically. When you're ready go to the Share/Export button. This will call up the Save panel. Choose from either Original + Settings or JPEG.


Choose file type, sizing and more
JPG (Small)
2048px, 90% quality
JPG (Large)
Full size, 100% quality
Original
Original + Settings
Previous Settings
JPG, Full Size, 100% → images
Share
_NIK0018 before.jpg
_NIK0018.NEF
example 2.NEF
XMP
example 2.xmp

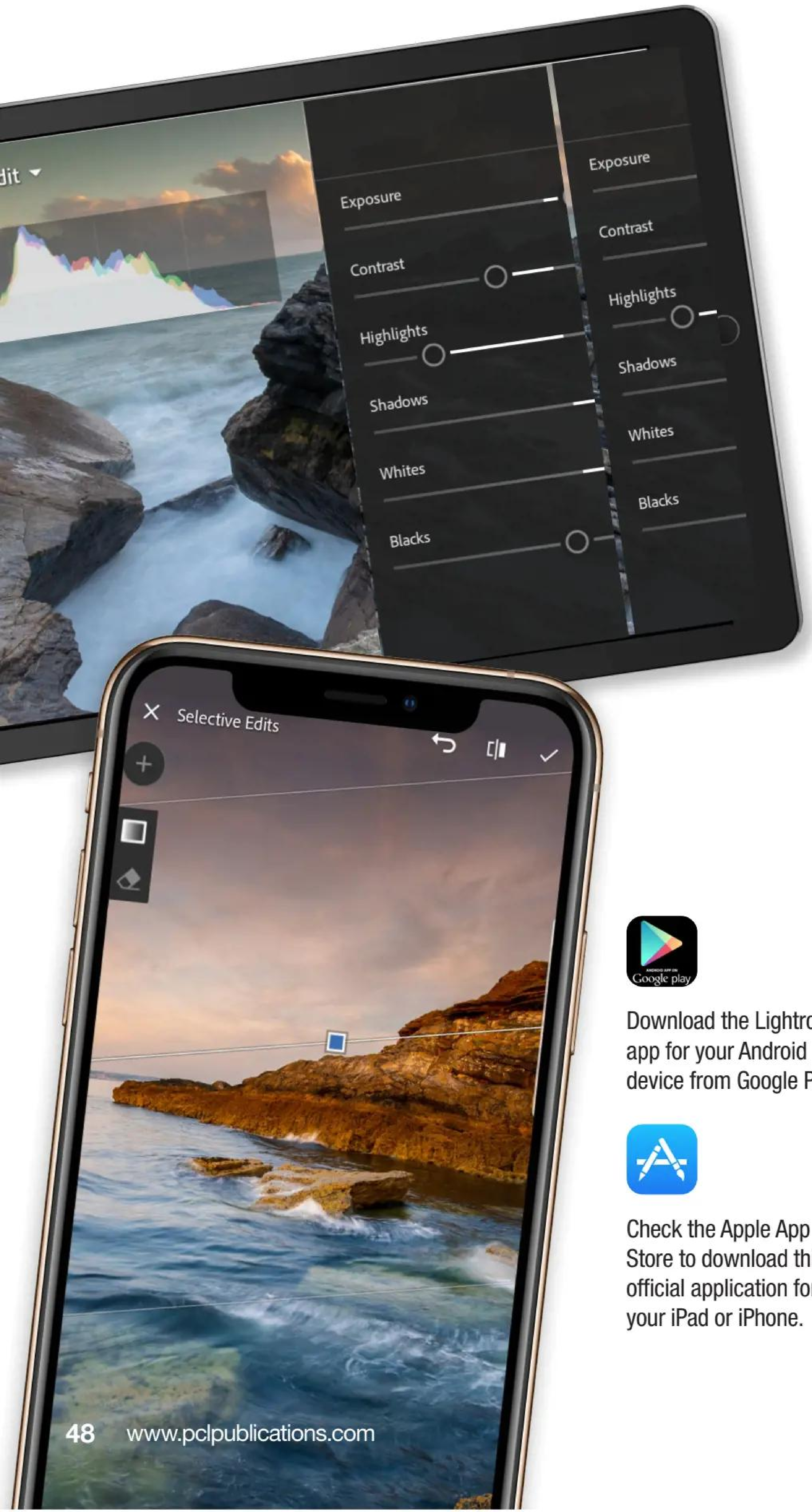
21 If you choose Original + Settings, your Raw file will be saved locally to your computer, along with an XMP file. This file contains all the non-destructive edits made to your image. This is a non-destructive method that allows you to open the file up again at any time and make new adjustments to the image.


1 Photo Selected
Export
Custom Settings...
Choose file type, sizing and more
JPG (Small)
2048px, 90% quality
JPG (Large)
Full size, 100% quality
Original
Original + Settings
Previous Settings
_NIK0018 before.jpg
Ps
example 2.jpg

22 If you choose JPEG as your image option, you have the ability to select a Small reduced size version, Full Size or a Custom image size as you see fit. When you have chosen the size of the image you want, you can then press the Save button to download a JPEG to your machine with all the edits you have made in place.

Lightroom on Your Mobile Devices

The mobile version of Lightroom allows you to access, edit, organise and share your photos on your iPad, iPhone or Android device. With it you can sync any changes, so updated images are available for further editing in the Lightroom desktop program.



Download the Lightroom app for your Android device from Google Play.

Check the Apple App Store to download this official application for your iPad or iPhone.

Going Mobile

Adobe's reach to the mobile app world is one of the best examples of the collaboration between devices and standard desktop systems. There's plenty you can achieve in the mobile version of Lightroom but thanks to some clever development on behalf of Adobe being able to get to the mobile images is remarkably easy from the desktop version of Lightroom.

The Lightroom mobile app is frequently updated, with tweaks to its use, interface, how it interacts with the device and battery life considerations, and how it syncs with the desktop version. For example, with the Lightroom app you can create collections, just as you would with the desktop version, to help you better organise your images.

You're able to add existing photos taken on your device prior to installing the Lightroom app to a collection, or create a new collection for older content. From within the Lightroom app you can open a collection and tap the camera icon to take a picture and instantly add it to the collection.

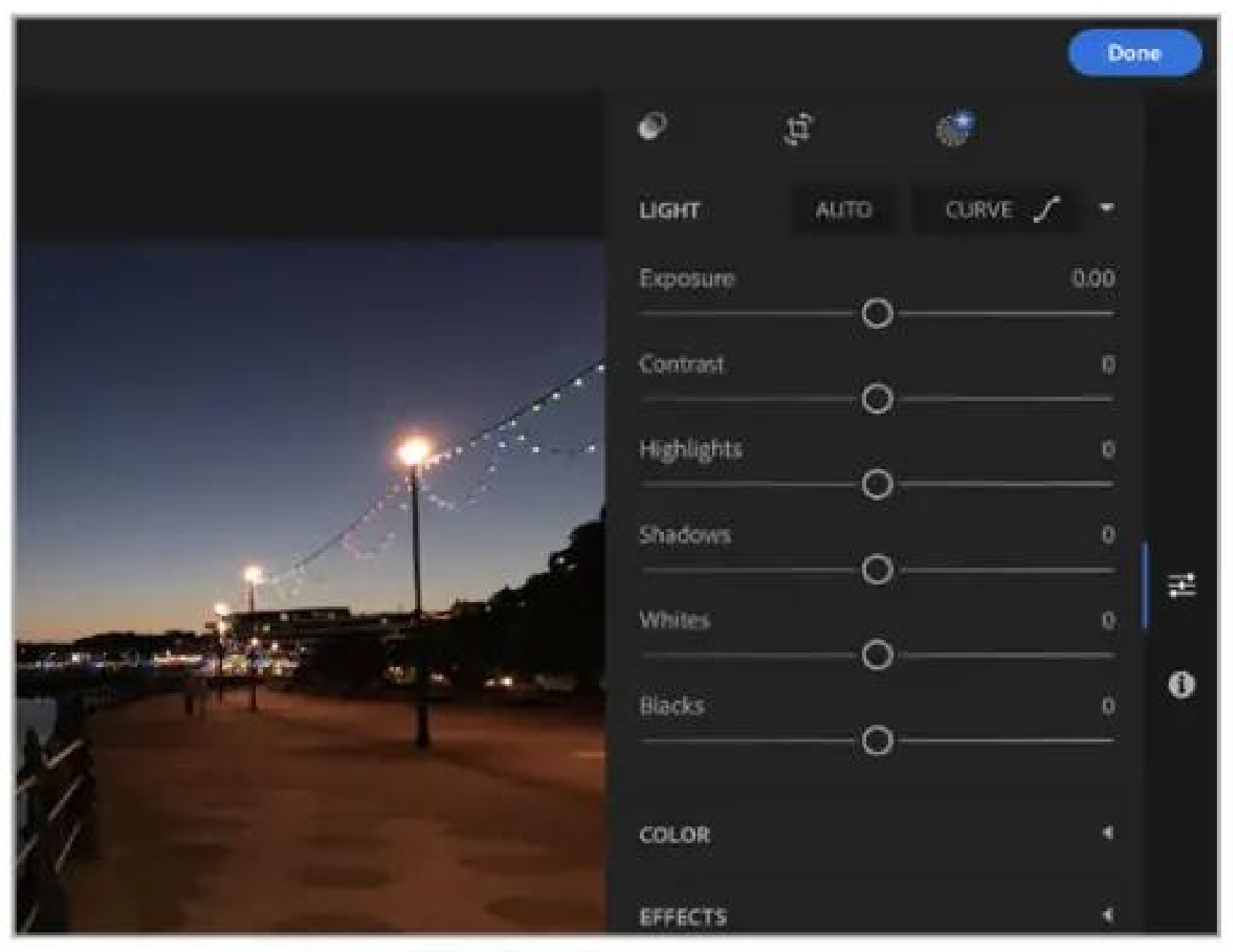
There's both automatic and professional options available when taking a photo. Auto mode will suffice for most users, with the Lightroom app applying any presets it determines will work best with image, its colours and light levels.

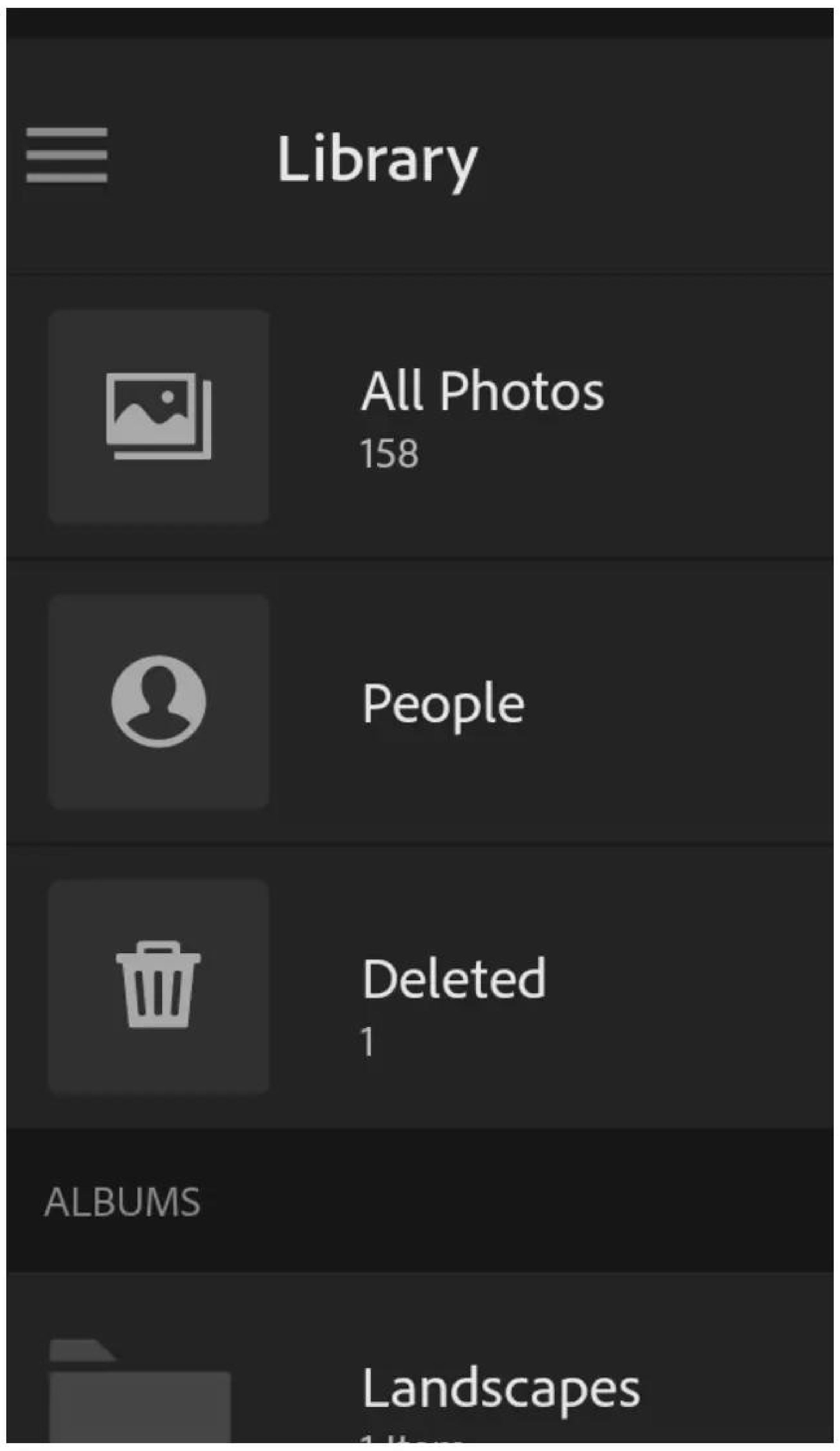
The Professional option will give you access to more settings, such as shutter speed, light levels, exposure and balancing, as well as various filters too.

The Lightroom app isn't just for snapping and storing, with it you're able to edit images. You can crop, apply presets, flag and rate images and eventually sync or share them to the desktop version of Lightroom or your Adobe web cloud account.

There's plenty to get to grips with here and with the new generation of iPhoneographers armed with powerful cameras built into their devices, there's no excuse to miss out on taking the perfect shot.

We look at some of the aspects of the Lightroom app in the coming pages, detailing how to set up the syncing to the Lightroom desktop version, organising photos in the app, image editing and how to share your photos.





Library

All Photos
158

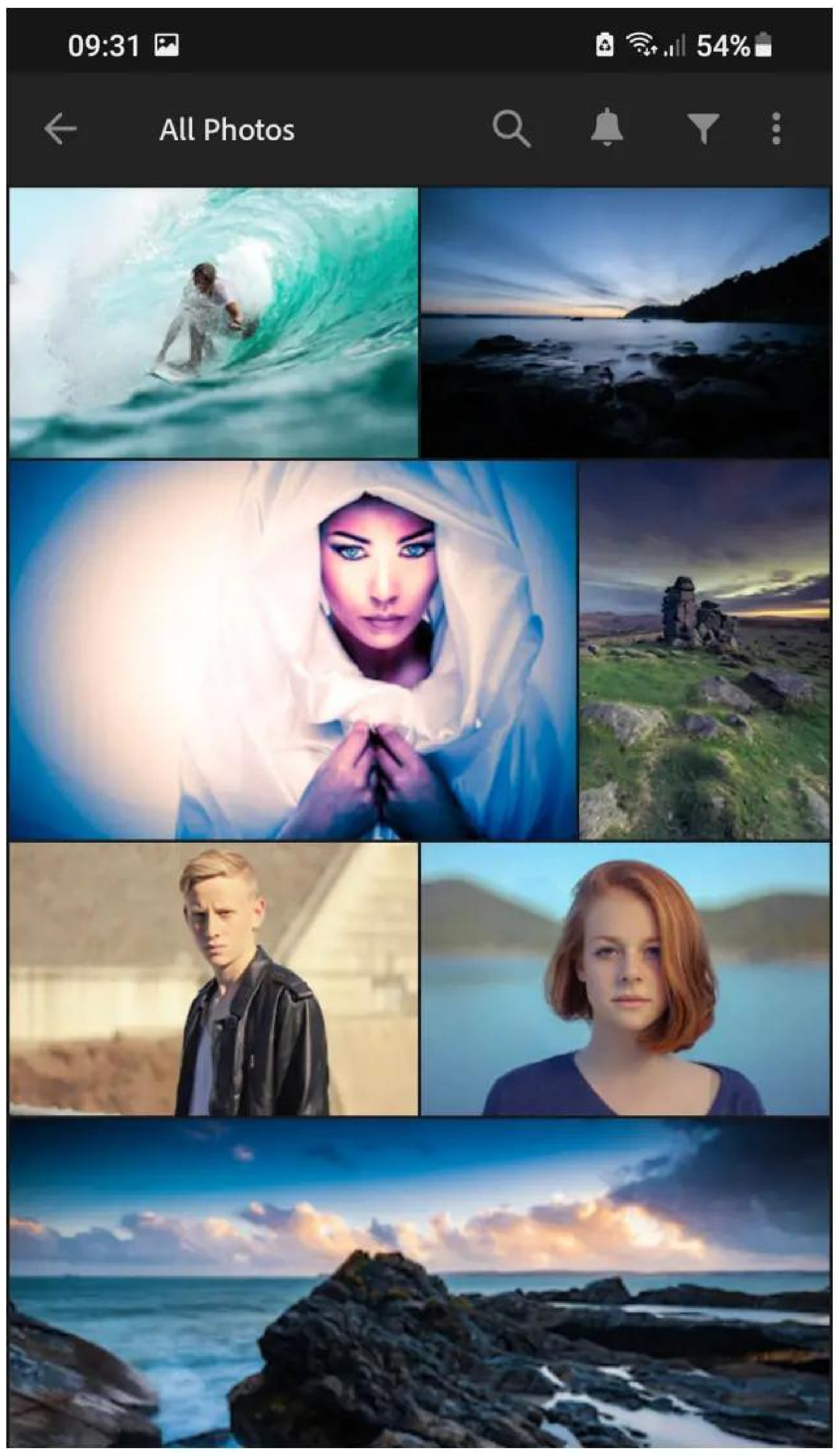
People

Deleted
1

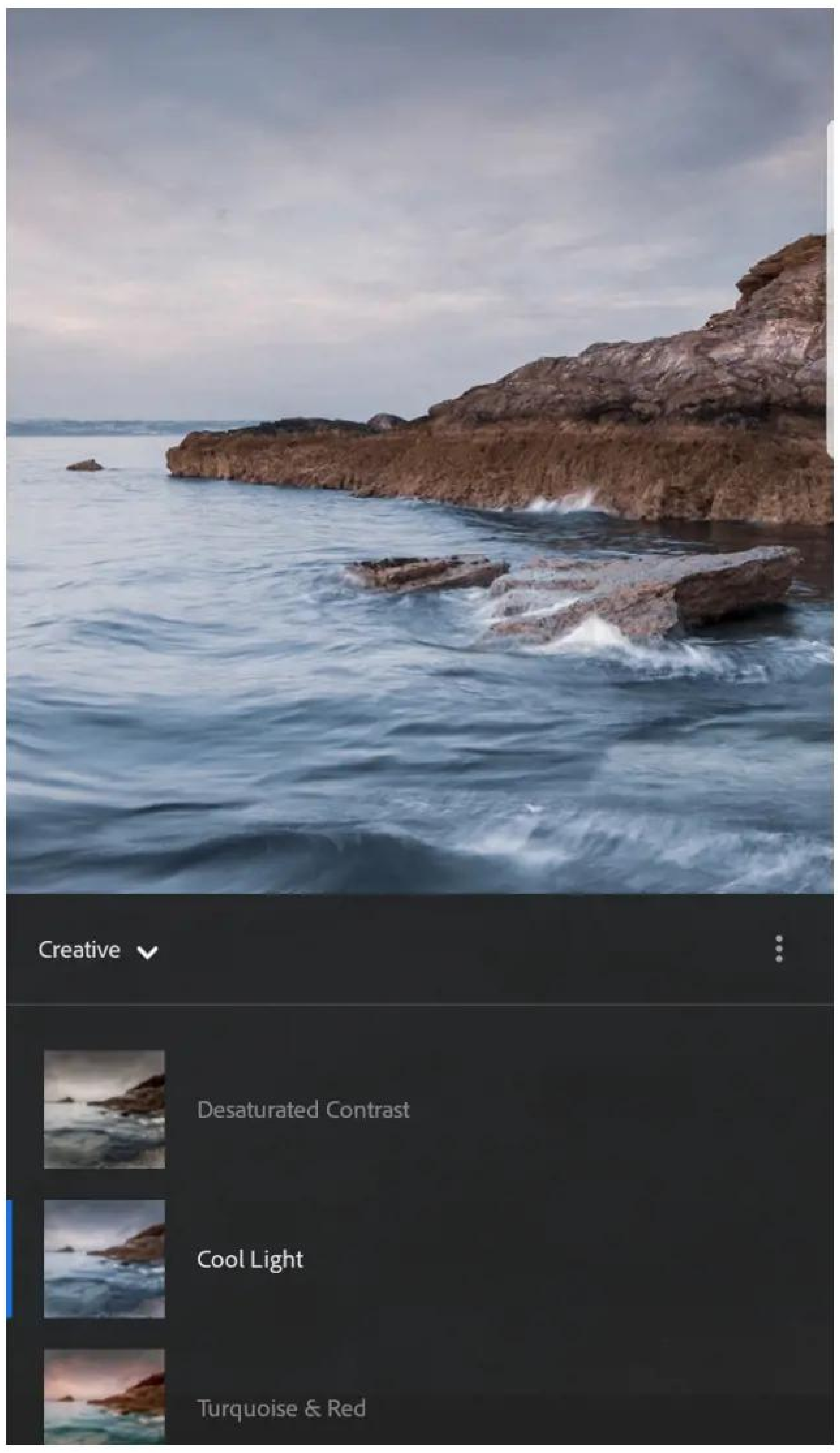
ALBUMS

Landscapes

The Lightroom mobile app has a simple and intuitive interface that lets you view all your images and also create Albums for your photos.


09:31
54%
All Photos

Within each Album, you can add previously taken photos that are stored in your phone's gallery, or tap the Camera icon to take a new image.

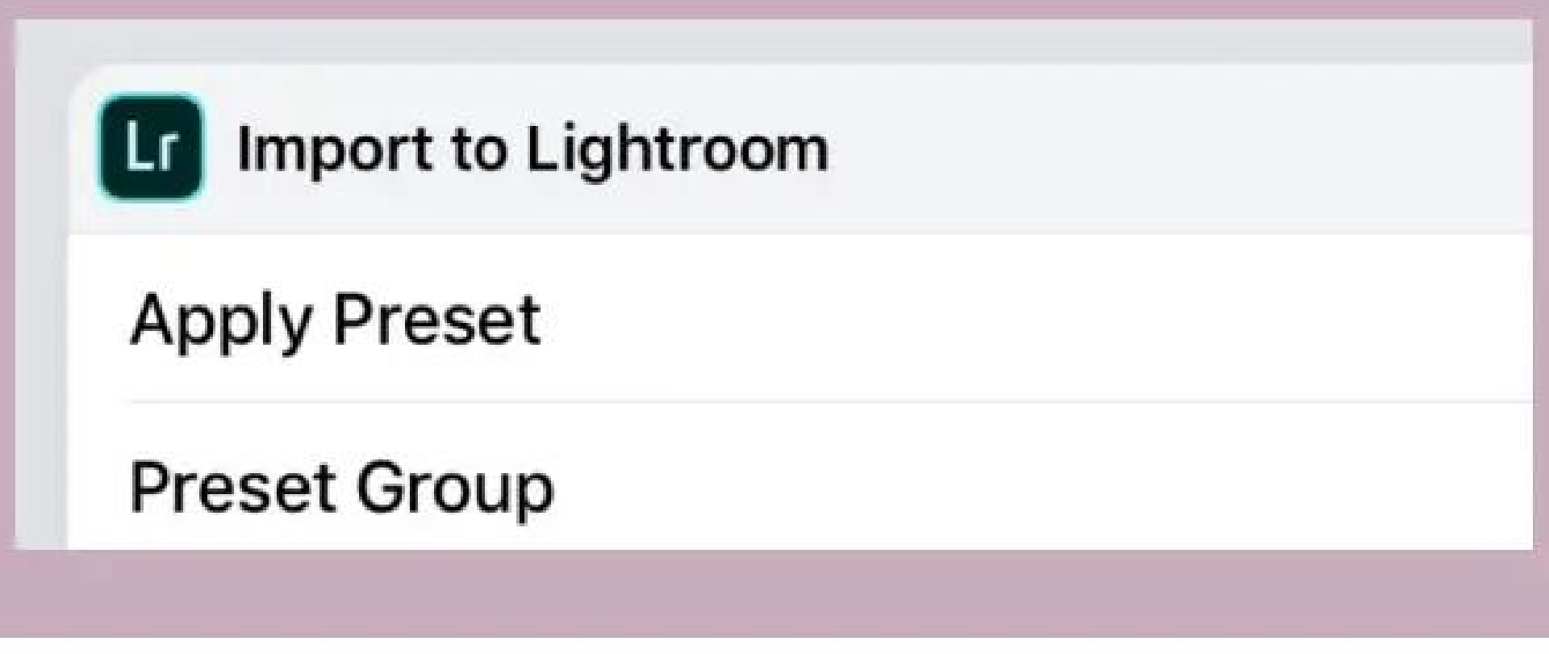

Creative
Desaturated Contrast
Cool Light
Turquoise & Red

You can easily edit any photos taken, adding a range of effects and alterations before syncing with the desktop version of Lightroom.

iOS Shortcuts

For owners of mobile devices using iOS 16 or later, there are a couple of handy shortcuts you can download. These let you edit your images, or sets of favorited images, in Lightroom while using the Photos app or actually move your Raw files from the Photos app to the Lightroom app instead. Since the introduction of Shortcuts in the Apple mobile operating system, you can now get on with the task of editing your photos using fewer taps on your screen.

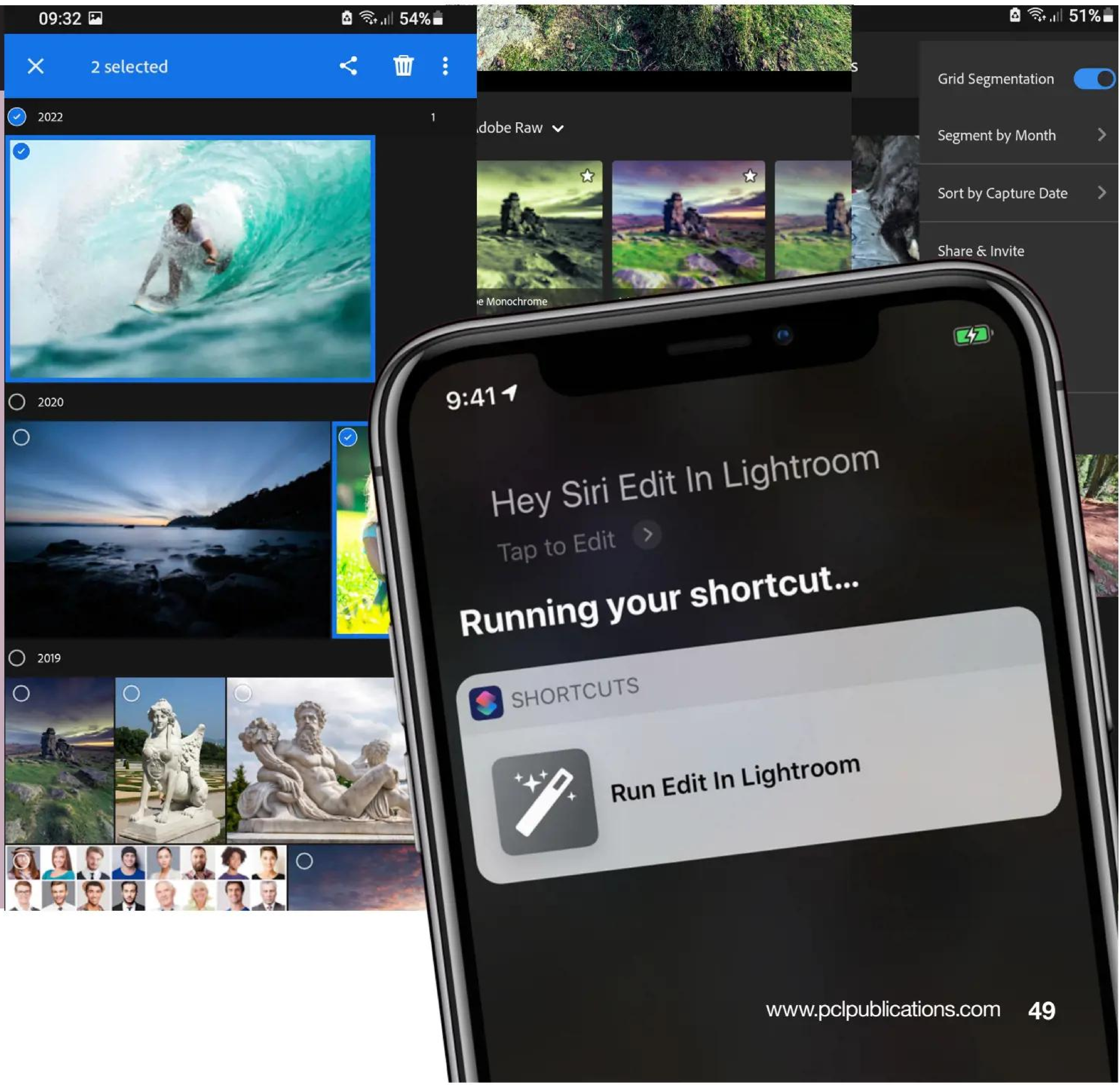
To make sure this works as expected you will need to be using at least iOS 16 and have a downloaded version of the Shortcuts app. You will of course need to be using the latest Lightroom app with support for Shortcuts app. You can access the Shortcut as a widget, as a voice command through Siri or from your Home screen.



Import to Lightroom

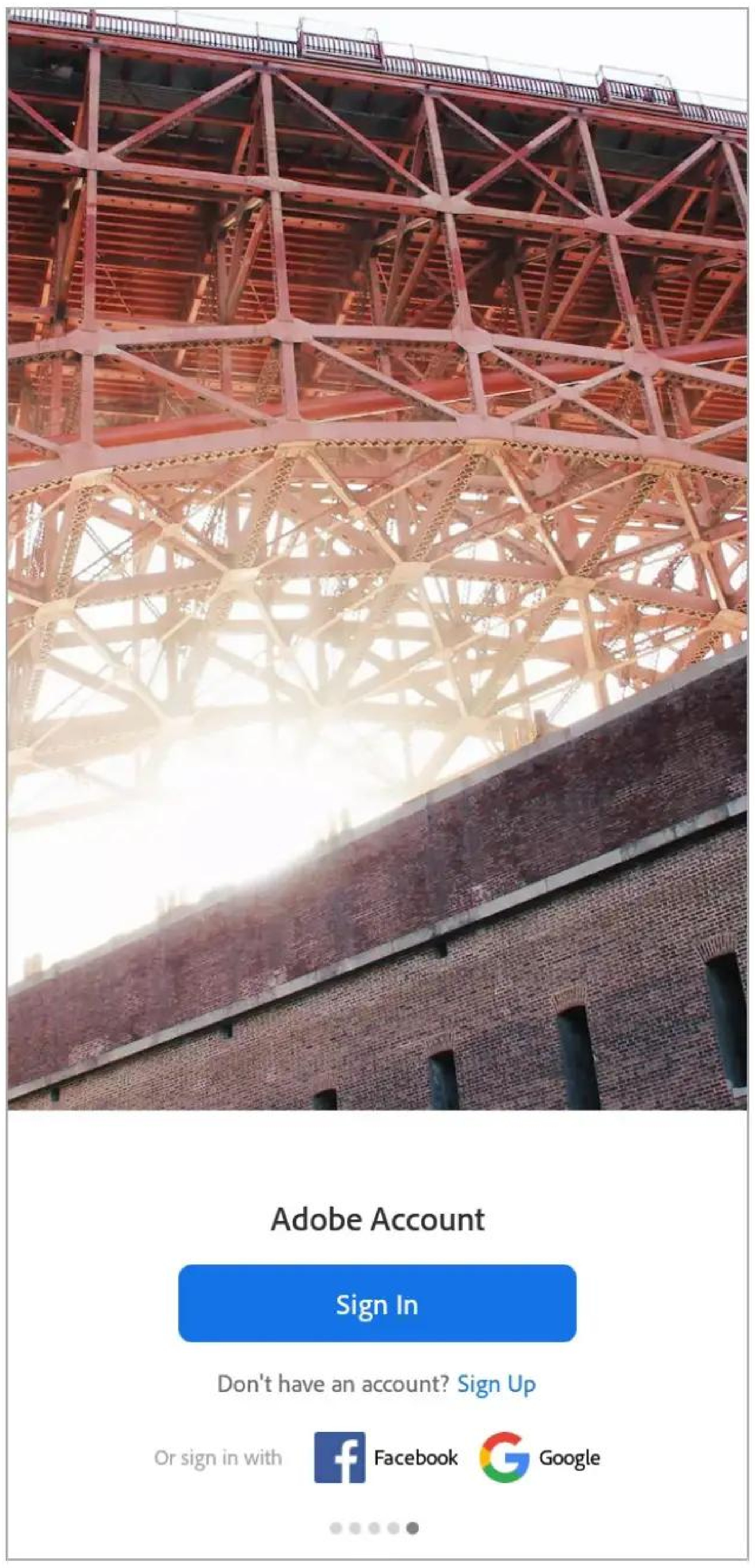
Apply Preset

Preset Group

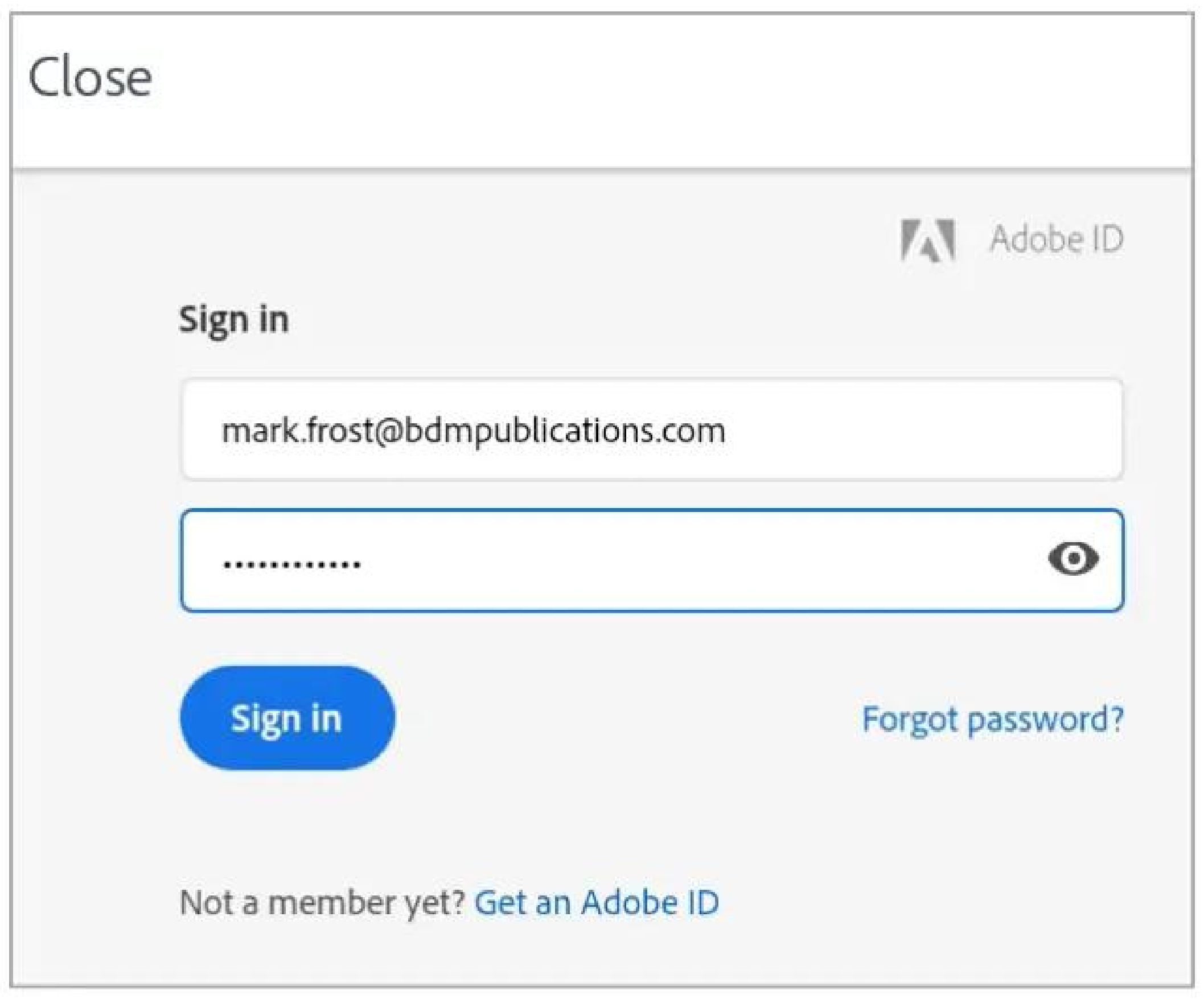

09:32
54%
2 selected
2022
1
2020
2019
51%
Adobe Raw
Monochrome
Grid Segmentation
Segment by Month
Sort by Capture Date
Share & Invite
9:41
Hey Siri Edit In Lightroom
Tap to Edit
Running your shortcut...
SHORTCUTS
Run Edit In Lightroom

Syncing Lightroom

To get the best from Lightroom and the desktop version, you need to set up a sync between the two. This way, you're able to easily upload images whilst you're out and about and can apply the more powerful features of the desktop version when you get back to the desk.

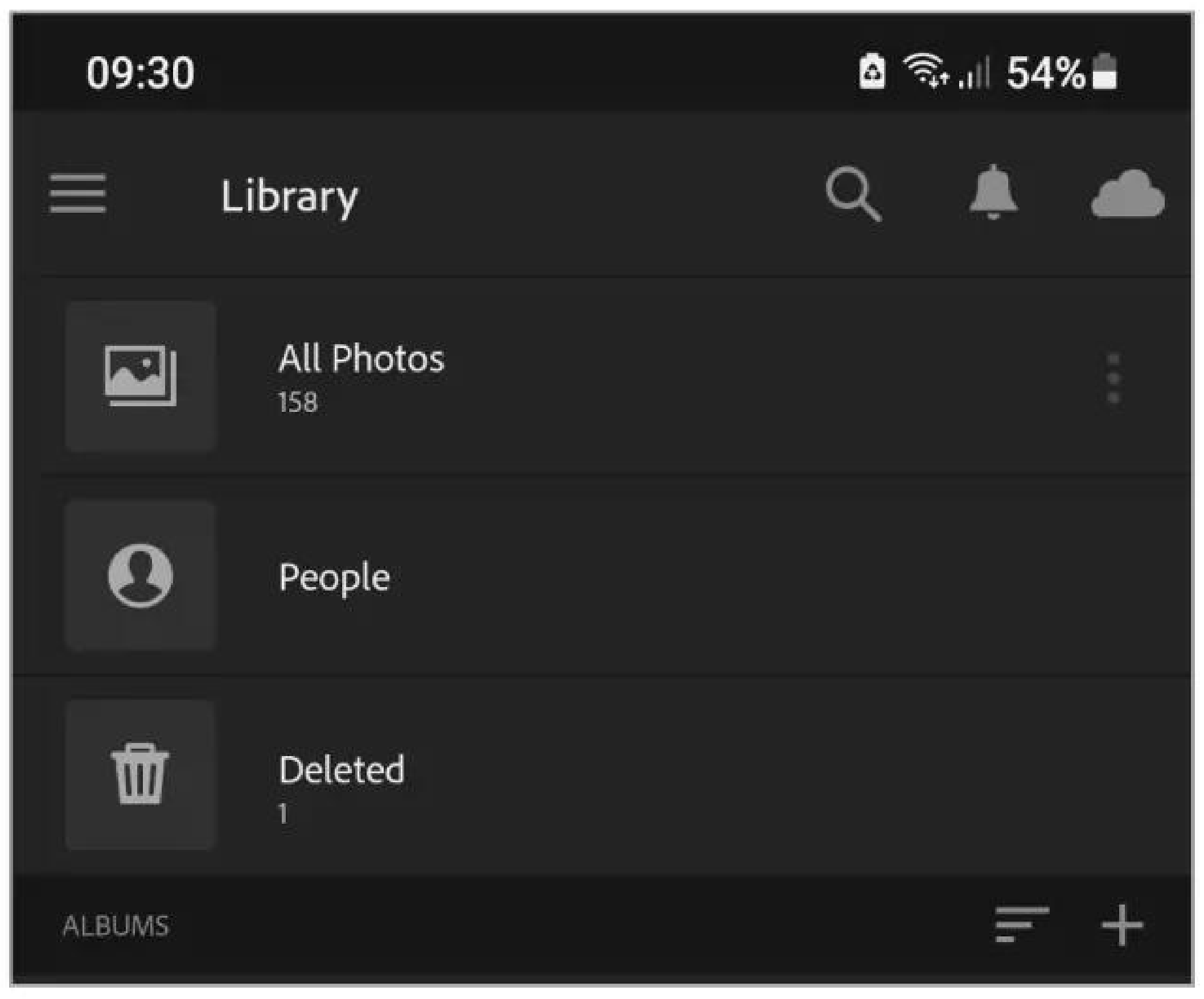

Adobe Account
Sign In
Don't have an account? Sign Up
Or sign in with
Facebook
Google

1 You can begin the set up by searching for the Lightroom app on your device's application store and tap the relevant button to install it. Once the installation is complete, open the app and you will be prompted to accept the Adobe agreement and tap the Sign In button or Sign Up.

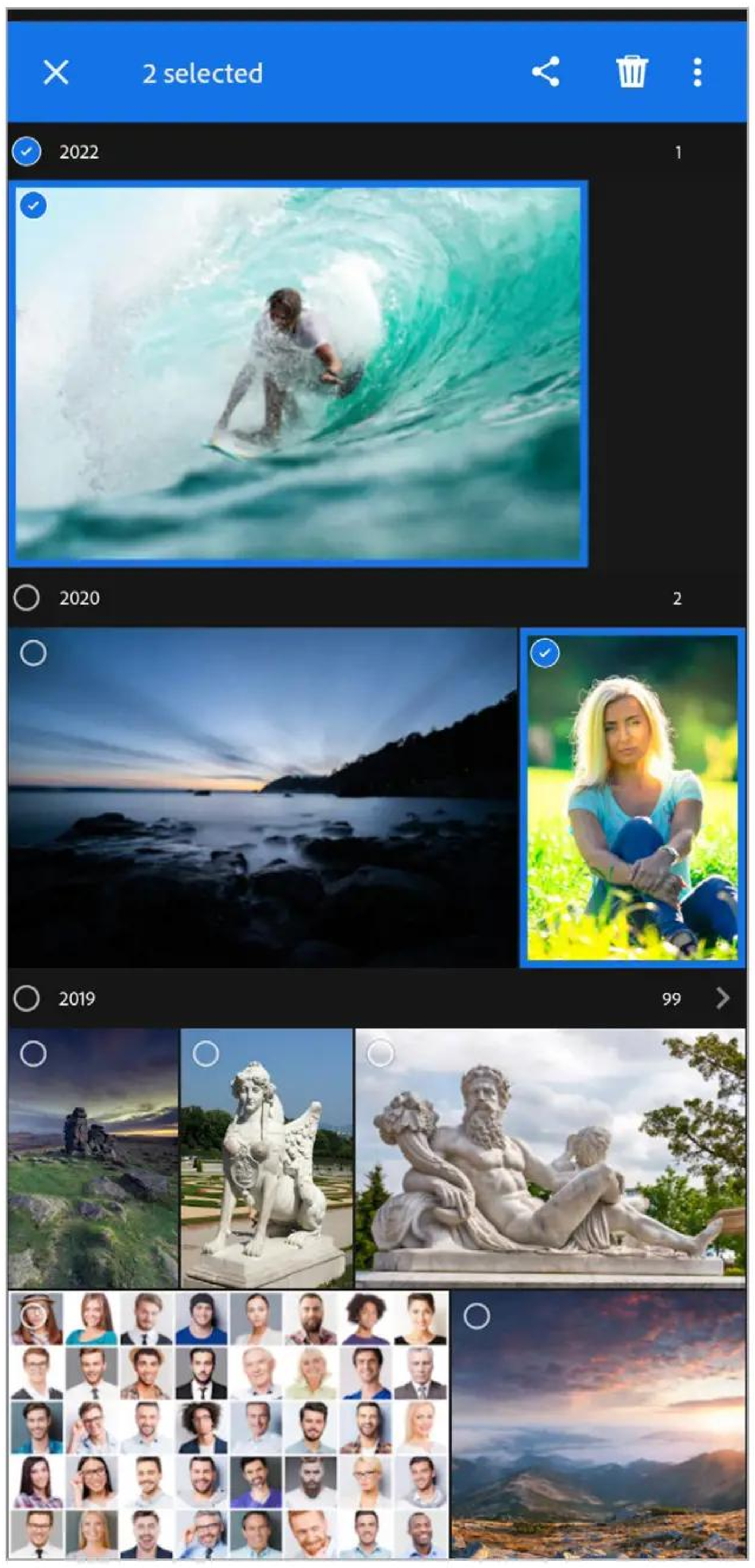

Close
Adobe ID
Sign in
Sign in
Forgot password?
Not a member yet? Get an Adobe ID

mark.frost@bdmpublications.com

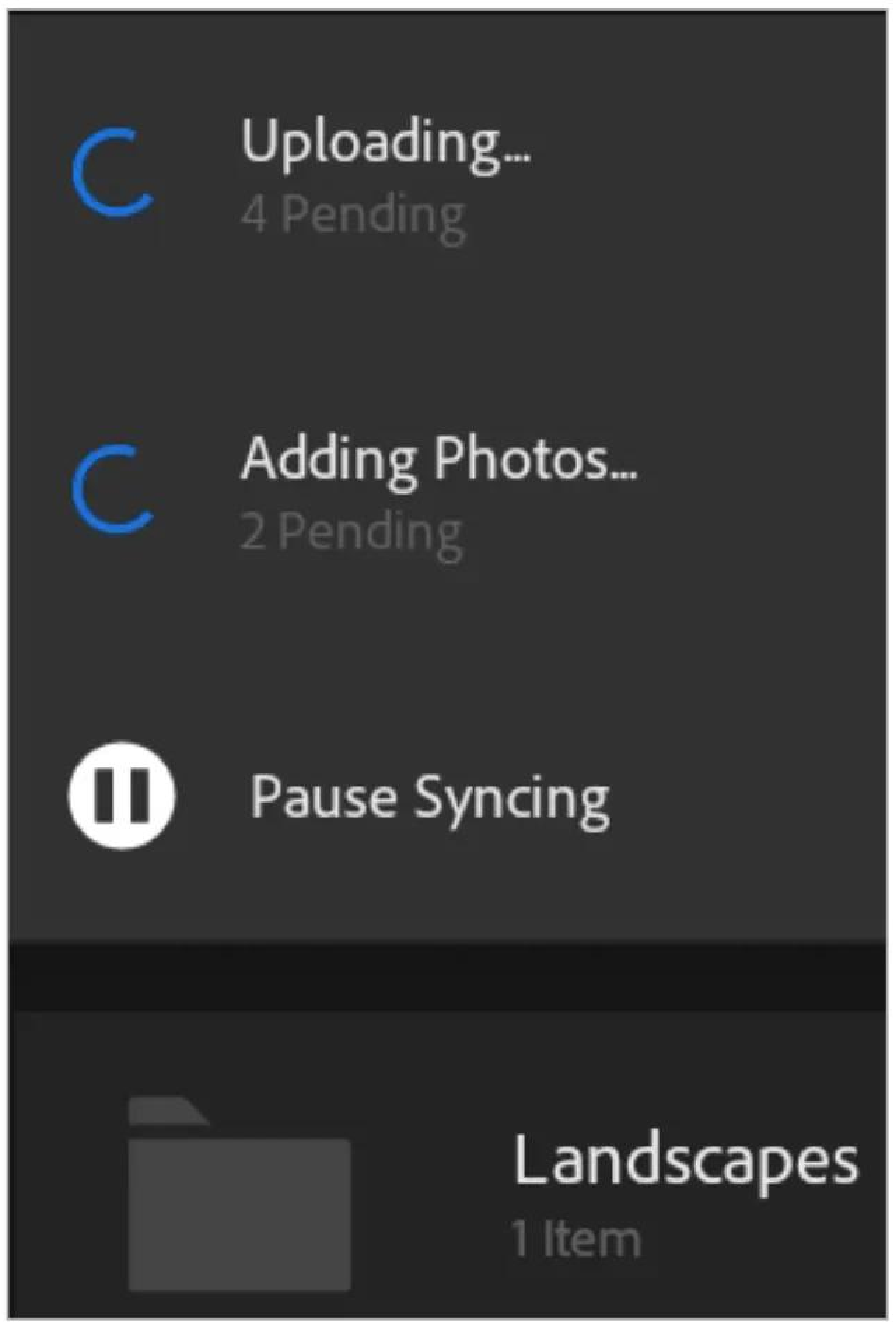
2 Enter your Adobe username and password, the same one that you used when you signed up for Lightroom or the Adobe Cloud. When ready, tap the Sign In button to log in to the Lightroom app and the Adobe Cloud.


09:30
54%
Library
All Photos
158
People
Deleted
1
ALBUMS

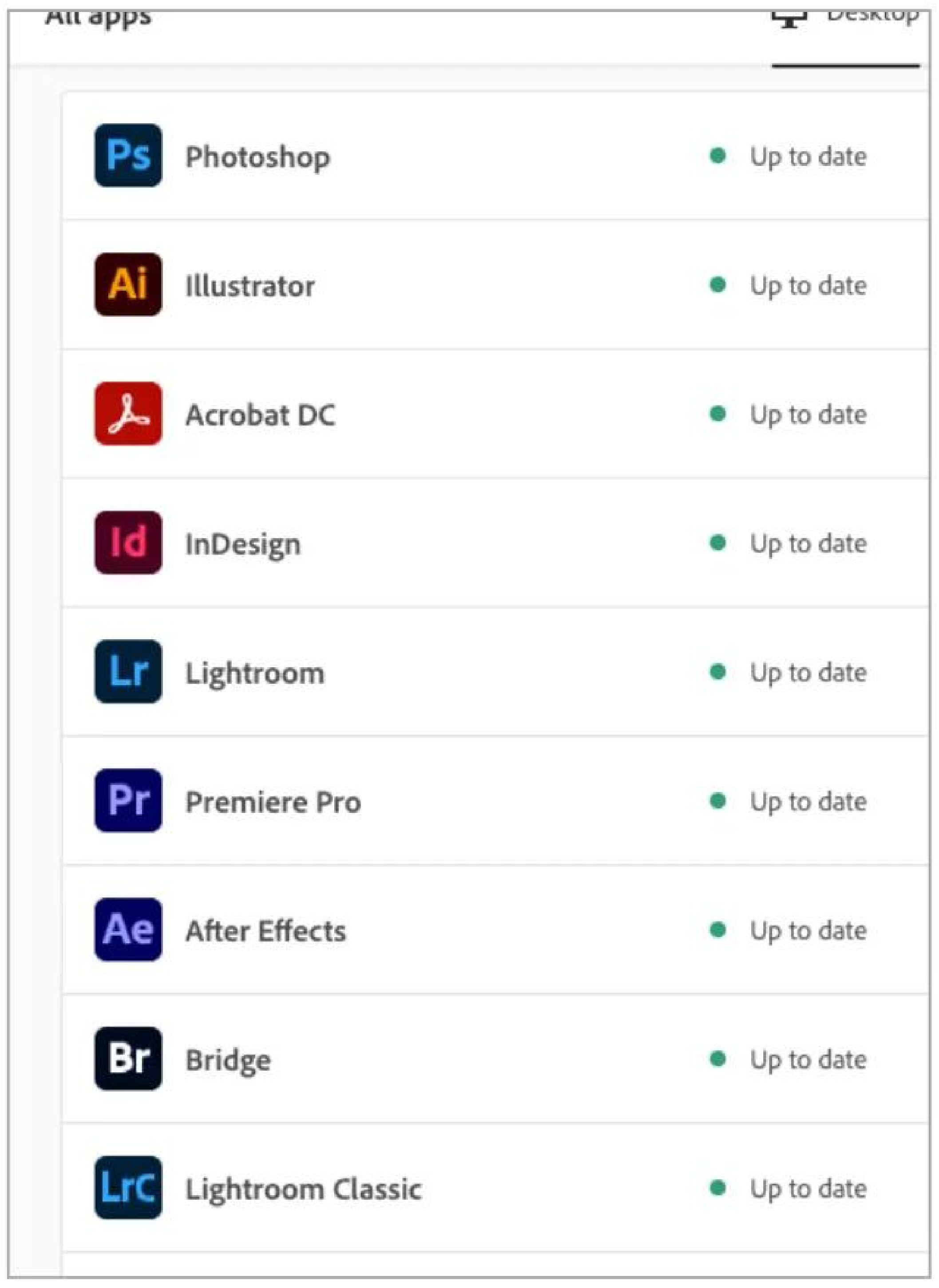
3 After a few moments you should be logged in; if not, double check your connection to the Internet and username and password for any mistakes. The Lightroom interface appears a little bleak to begin with. Let's begin by adding photos to a collection for uploading. Tap the Add Photos button at the bottom of the UI.


2 selected
2022
1
2020
2
2019
99

4 You now have a list of all the photographs that you have taken on the device. Now you can scroll through them and select a few examples to test the syncing. You can select them by tapping the circle in the top left of the image thumbnail. Tap Add when you've made your selection.

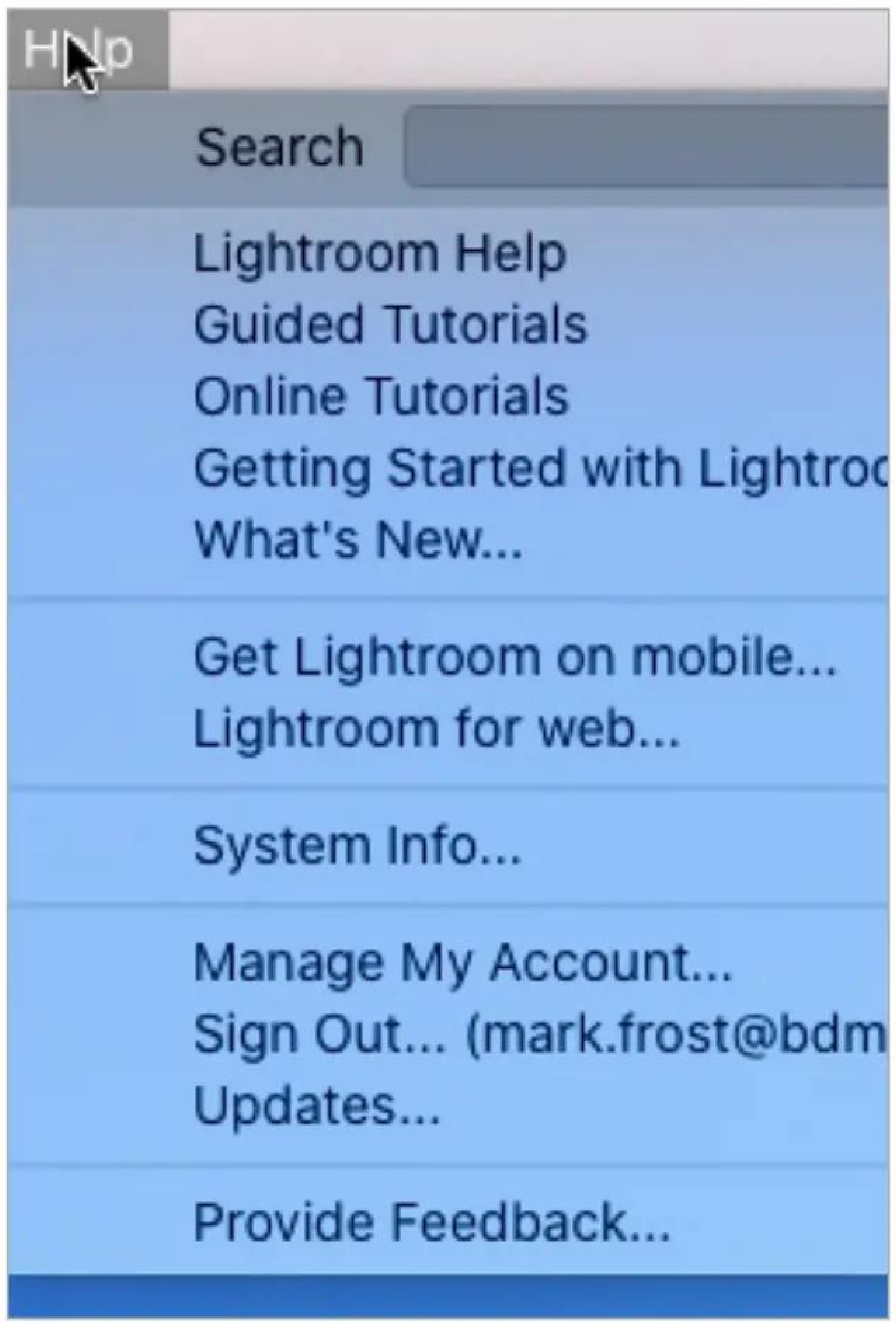

Uploading...
4 Pending
Adding Photos...
2 Pending
Pause Syncing
Landscapes
1 Item

5 You will then be returned to the main Lightroom front screen interface. You will be informed of the upload progress of your images. You may need to tap the cloud icon located in the upper right of the UI and re-enter your Adobe login details. We needed to do this just the once, yet another device we were using didn't require it.

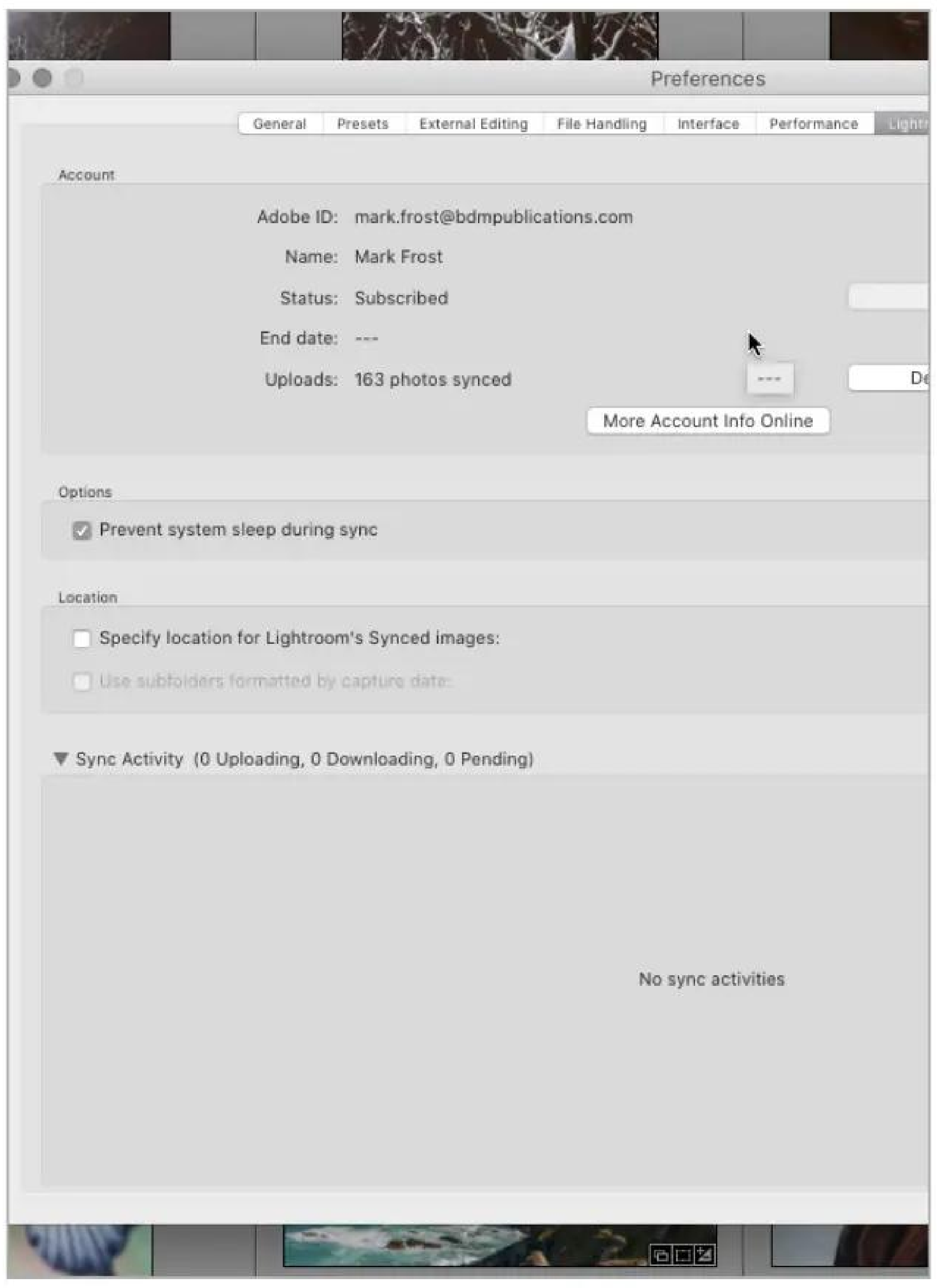

All apps
Desktop

Photoshop	● Up to date
Illustrator	● Up to date
Acrobat DC	● Up to date
InDesign	● Up to date
Lightroom	● Up to date
Premiere Pro	● Up to date
After Effects	● Up to date
Bridge	● Up to date
Lightroom Classic	● Up to date

6 On the desktop version of Lightroom Classic or Lightroom, click on the Help option from the top menu followed by Updates. This will open the Creative Cloud update manager window. If there are updates for Lightroom, or any other Adobe product you own or have on trial, then apply the updates.


Help
Search
Lightroom Help
Guided Tutorials
Online Tutorials
Getting Started with Lightroo
What's New...
Get Lightroom on mobile...
Lightroom for web...
System Info...
Manage My Account...
Sign Out... (mark.frost@bdm
Updates...
Provide Feedback...

7 Updating Lightroom Classic and Lightroom versions ensures that both versions are working to valid version numbers. Often, an error in syncing is due to one version not recognising the other because of an update from one or the other. You may need to restart Lightroom. Now, click on your name in the top left of the Lightroom desktop version.

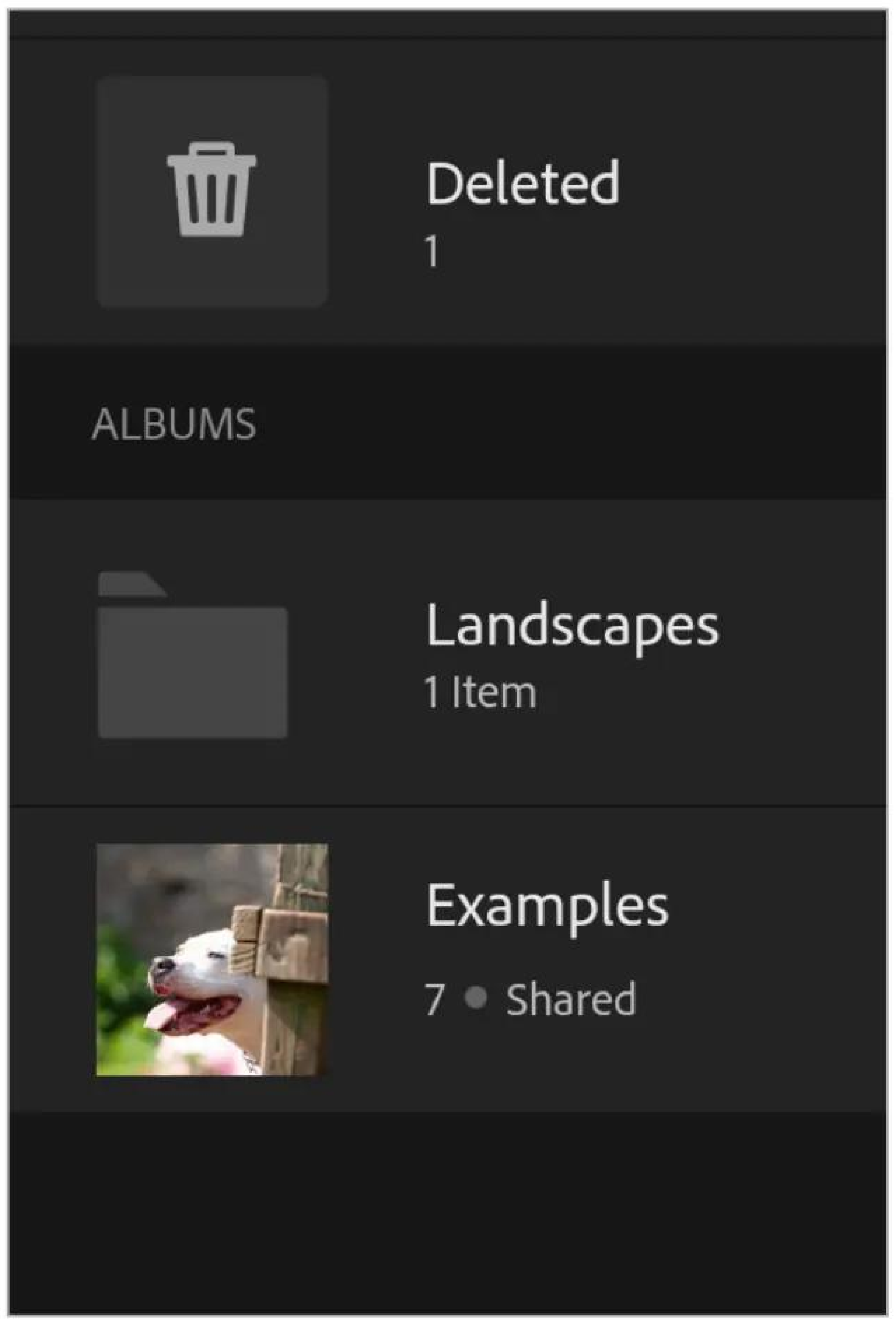

Preferences
General
Presets
External Editing
File Handling
Interface
Performance
Account
More Account Info Online
Options
Location
No sync activities

Adobe ID: mark.frost@bdmpublications.com
Name: Mark Frost
Status: Subscribed
End date: ---
Uploads: 163 photos synced

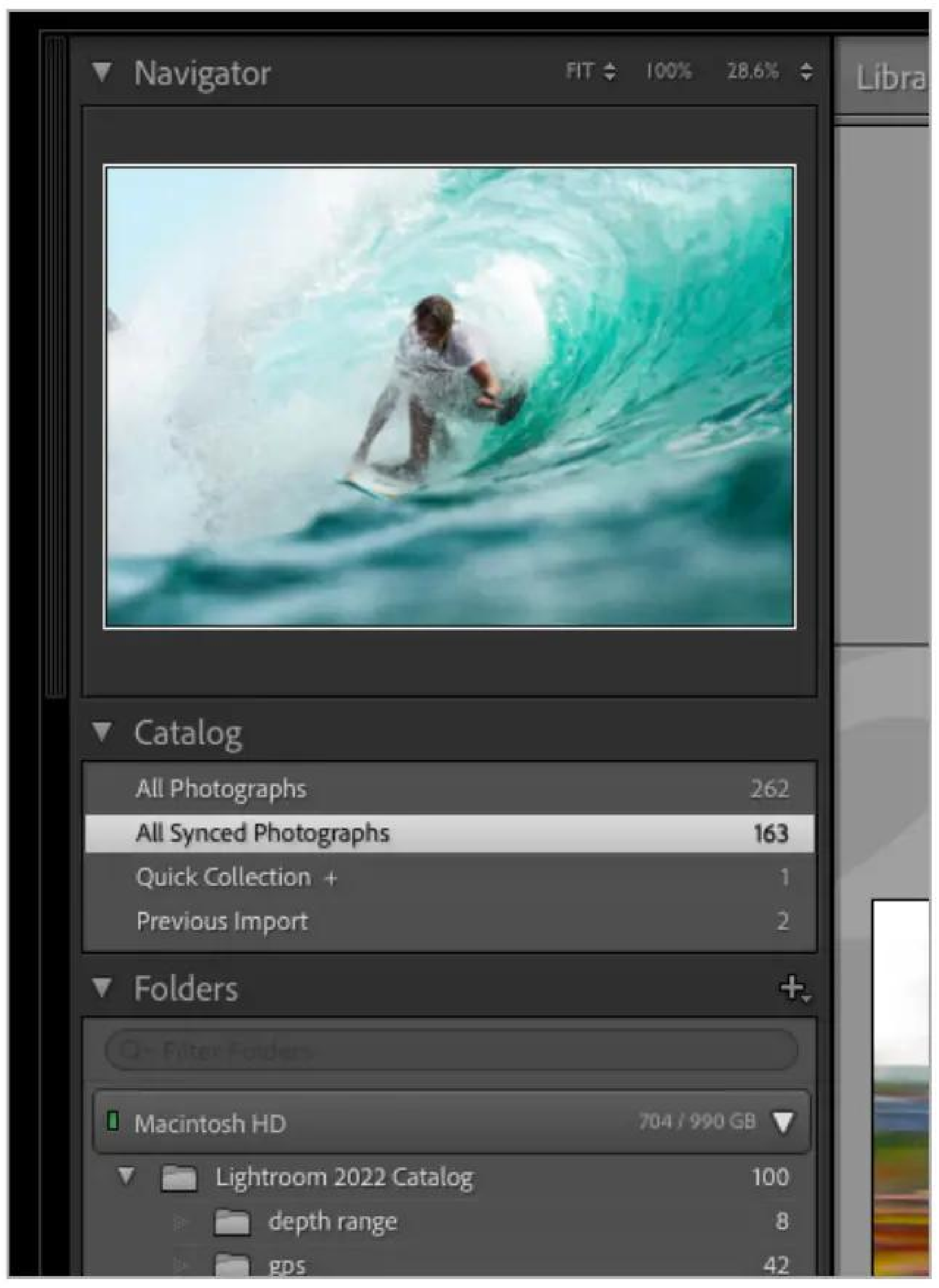
☑ Prevent system sleep during sync
☐ Specify location for Lightroom's Synced images:
☐ Use subfolders formatted by capture date:

▼ Sync Activity (0 Uploading, 0 Downloading, 0 Pending)

8 The menu expands under the cloud icon in the top right corner of the workspace. Clicking the gear icon lets you view your Lightroom Sync settings. This may ask for an updated username and password again, so be prepared to enter it. The syncing process will start and it will show you a progress bar.


Deleted
1
ALBUMS
Landscapes
1 Item
Examples
7 ● Shared

9 Specify the location and any sub folders for the Lightroom images that will be synced between the device and the desktop. Click the OK button and in Lightroom, click on the Cloud icon again to force an update. There will be a small icon with a check mark in it to indicate that your images are now synced and backed up.

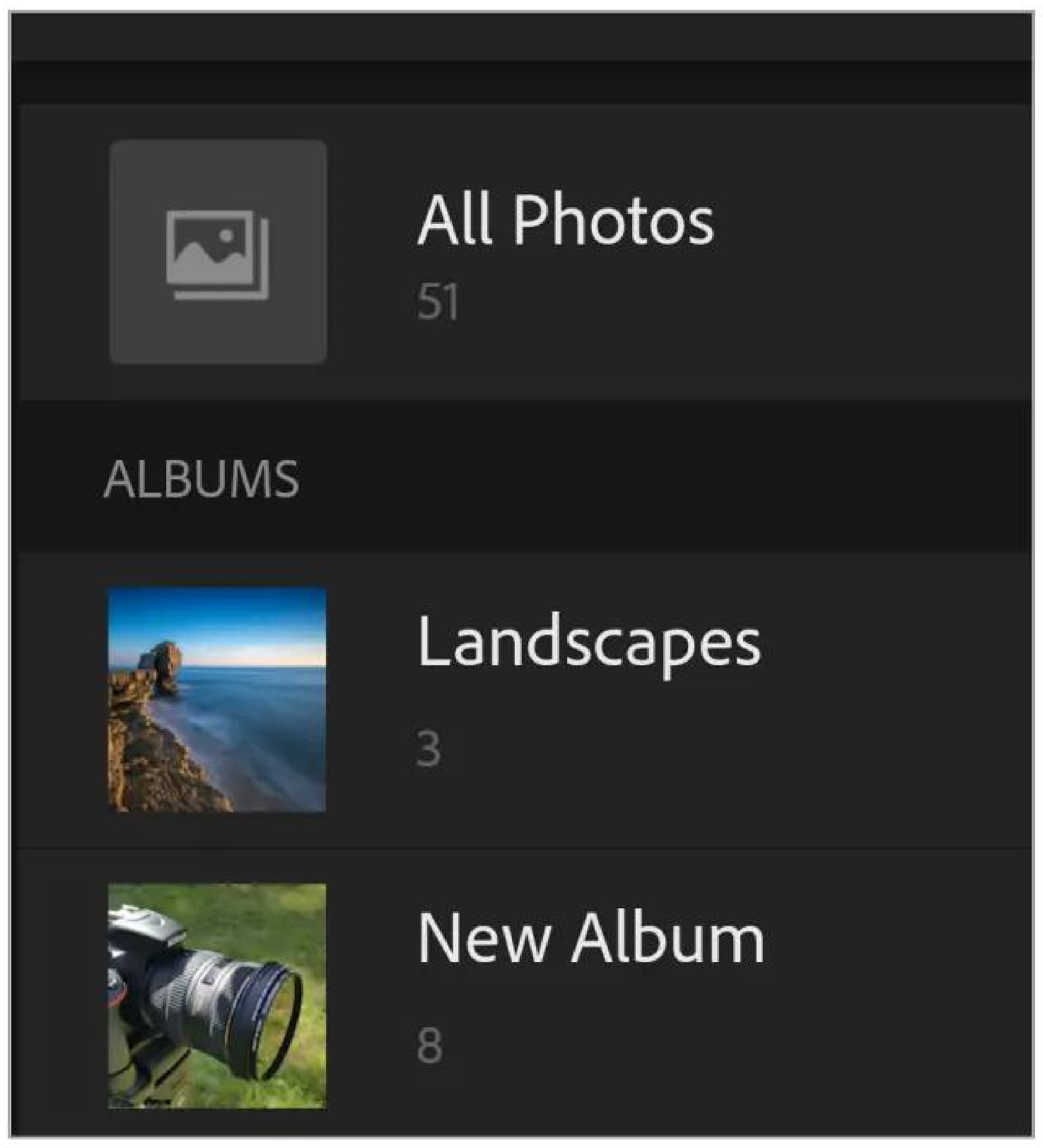

Navigator
FIT
100%
28.6%
Libra
Catalog
Folders
Filter Folders

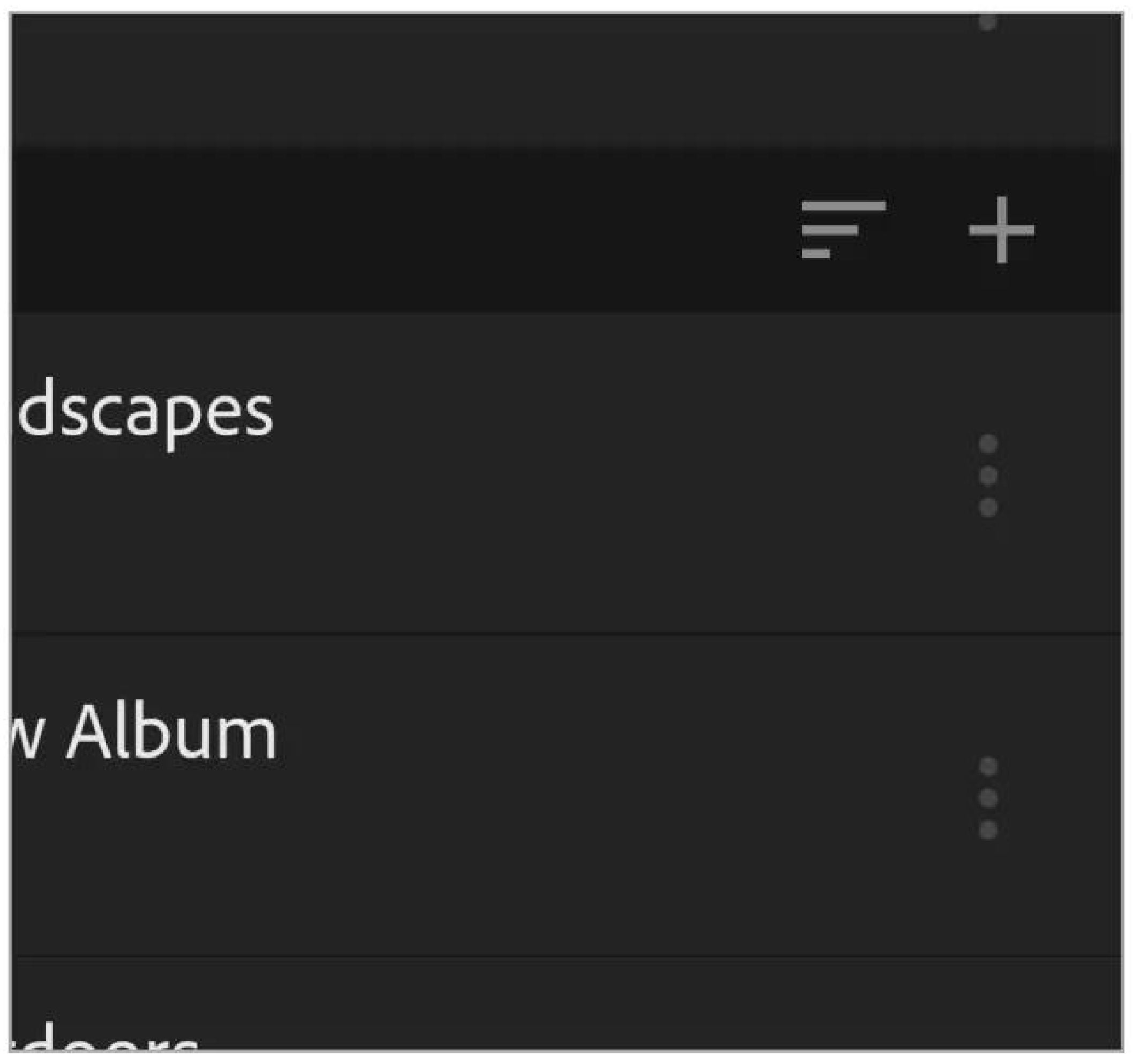
All Photographs	262
All Synced Photographs	163
Quick Collection +	1
Previous Import	2
Macintosh HD	704 / 990 GB
Lightroom 2022 Catalog	100
depth range	8
gps	42

10 Your synced photos from Lightroom should now be uploading into the desktop version of Lightroom Classic. They can be located in the Catalogue pane, under the All Synced Photographs section. You can see the status of synced photos from the Lightroom tab in the Preferences window.

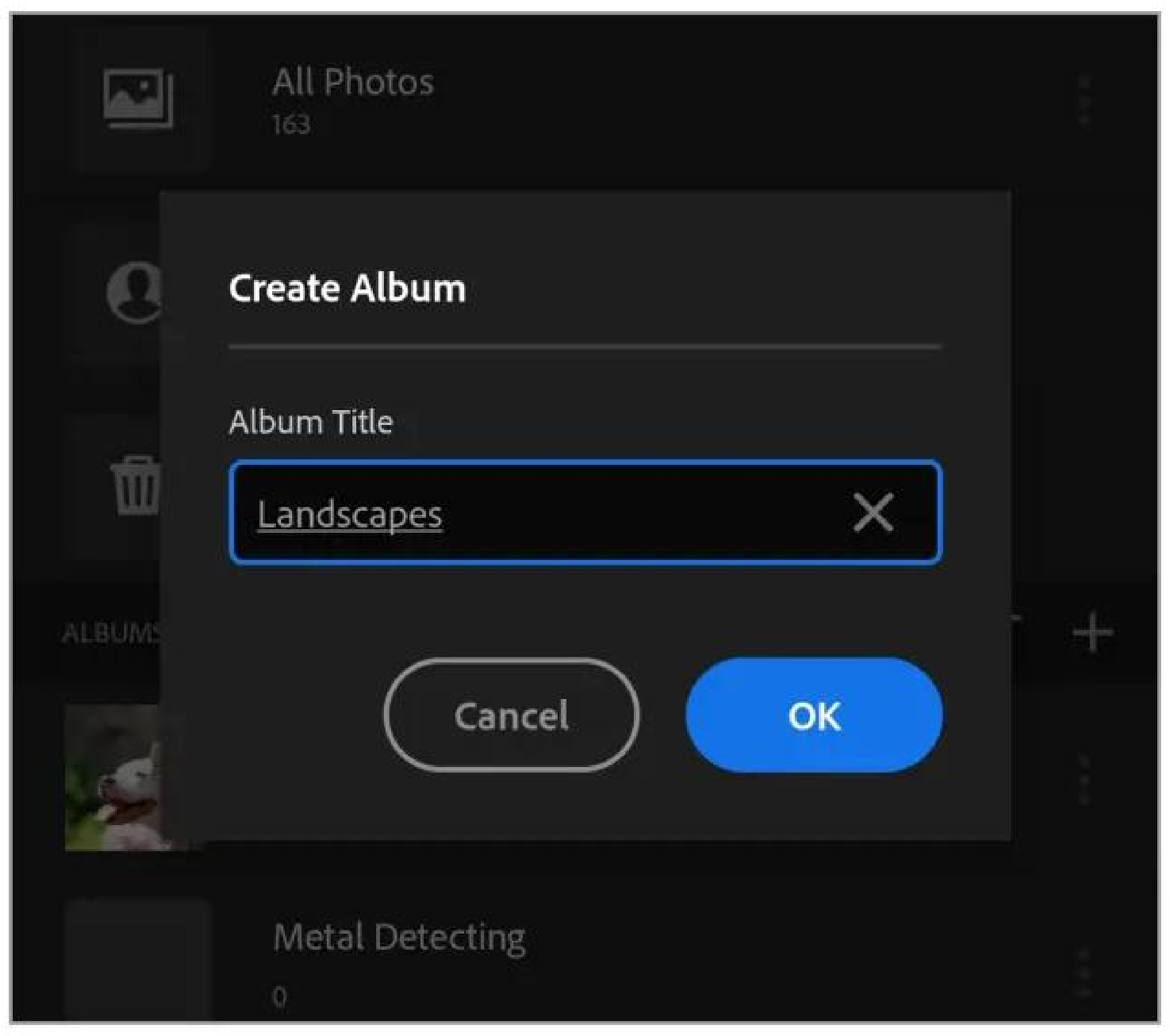
Organising Your Mobile Device

Lightroom in its mobile form uses Albums to help sort and organise your photos; think of an Album like a traditional photo collection. They help split the device's photos into categories, so you can have outdoors shots in one Album and people in another, for example.


All Photos
51
ALBUMS
Landscapes
3
New Album
8

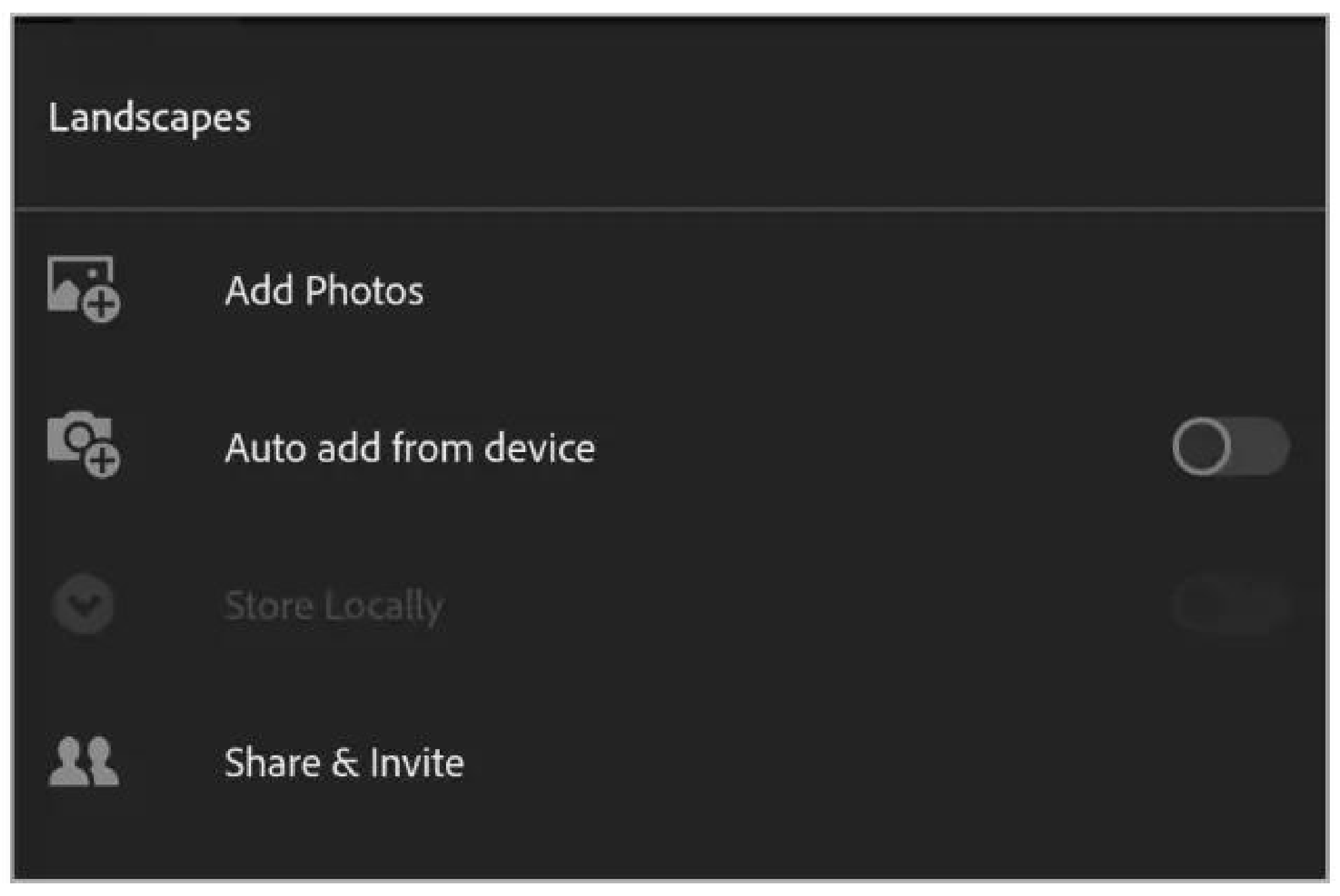

dscapes
w Album
doors

1 We start by firing up the Lightroom app on your mobile device and begin with the Lightroom front screen. You will see the thumbnail marked All Photos and below that is space for any of the Albums you create. Let's begin by tapping the plus icon to the right of the Album's title.

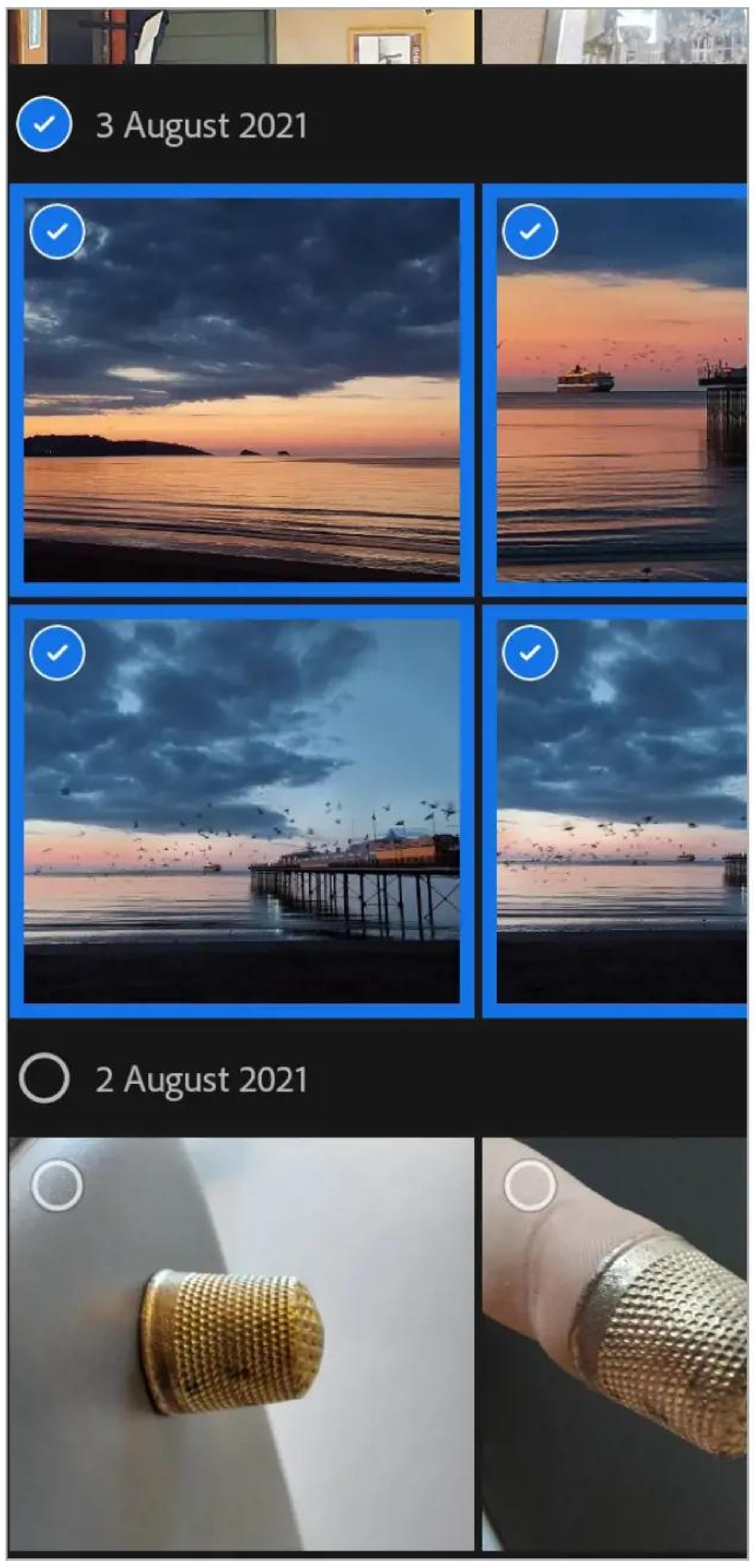

All Photos
163
Create Album
ALBUMS
Cancel
OK
Metal Detecting
0

Album Title: Landscapes

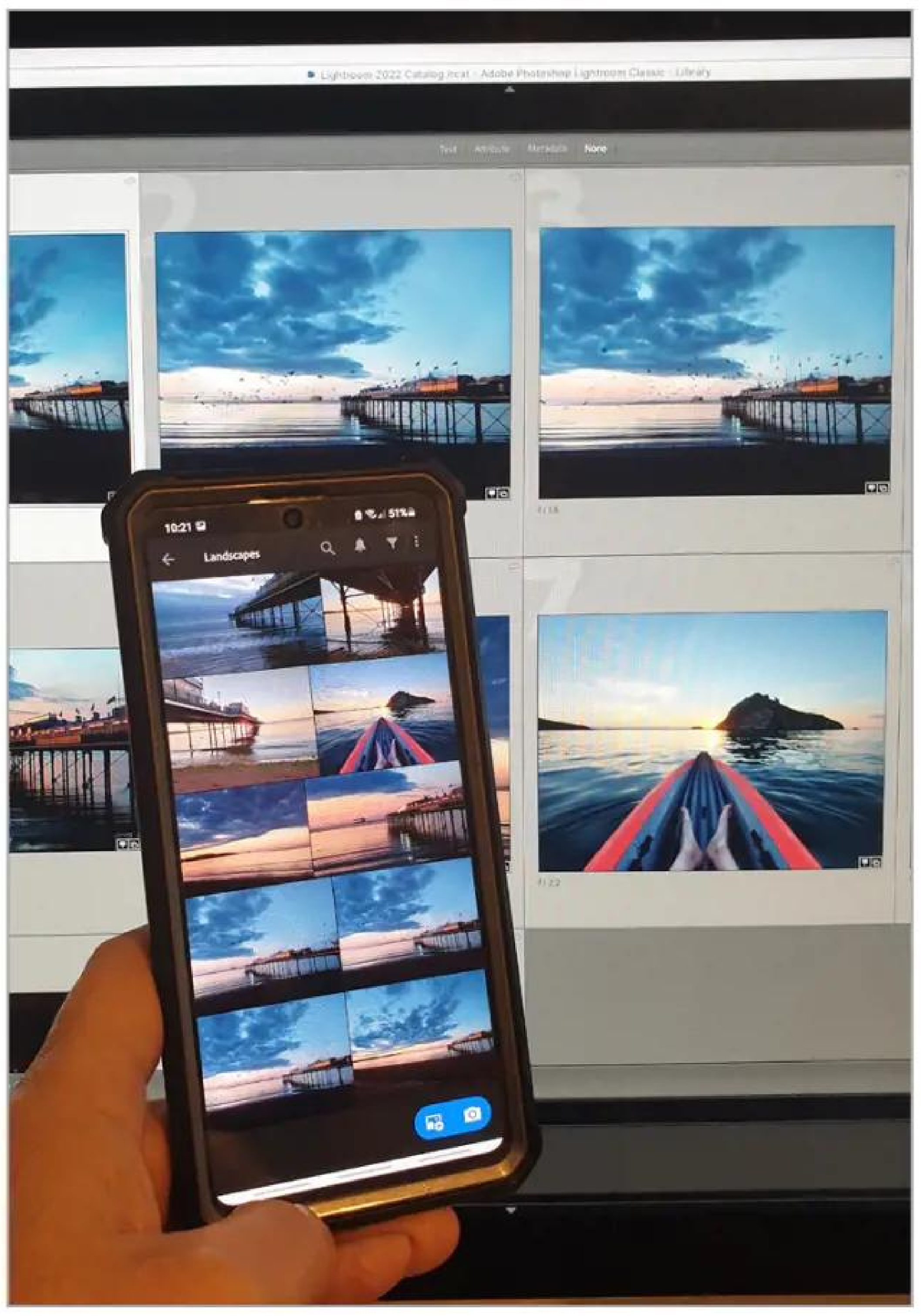
2 This will open a text box for you to enter the name of the new Album. By default the Lightroom app inserts the current time and date but you can add whatever name you want. Tap the OK button when you're ready to continue. A new album will be created with the filename you've used.


Landscapes
Add Photos
Auto add from device
Store Locally
Share & Invite

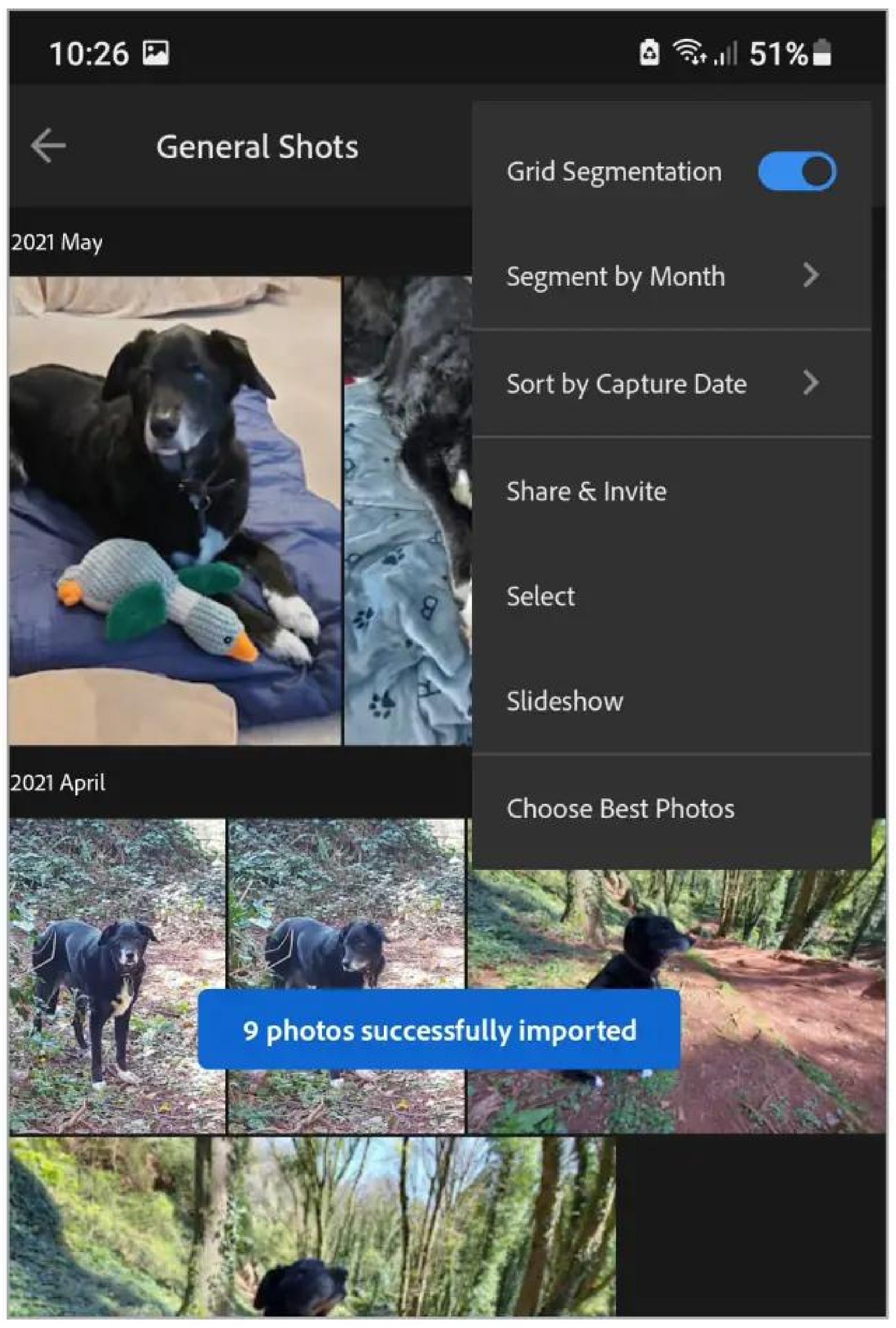
3 With the new Album created and ready for images, you have two ways in which you are able to add photographs to your collection. The first option you can choose is to tap the three vertical dots to the right of the Album and then select Add Photos from the menu that pops up from the bottom of the screen.


3 August 2021
2 August 2021

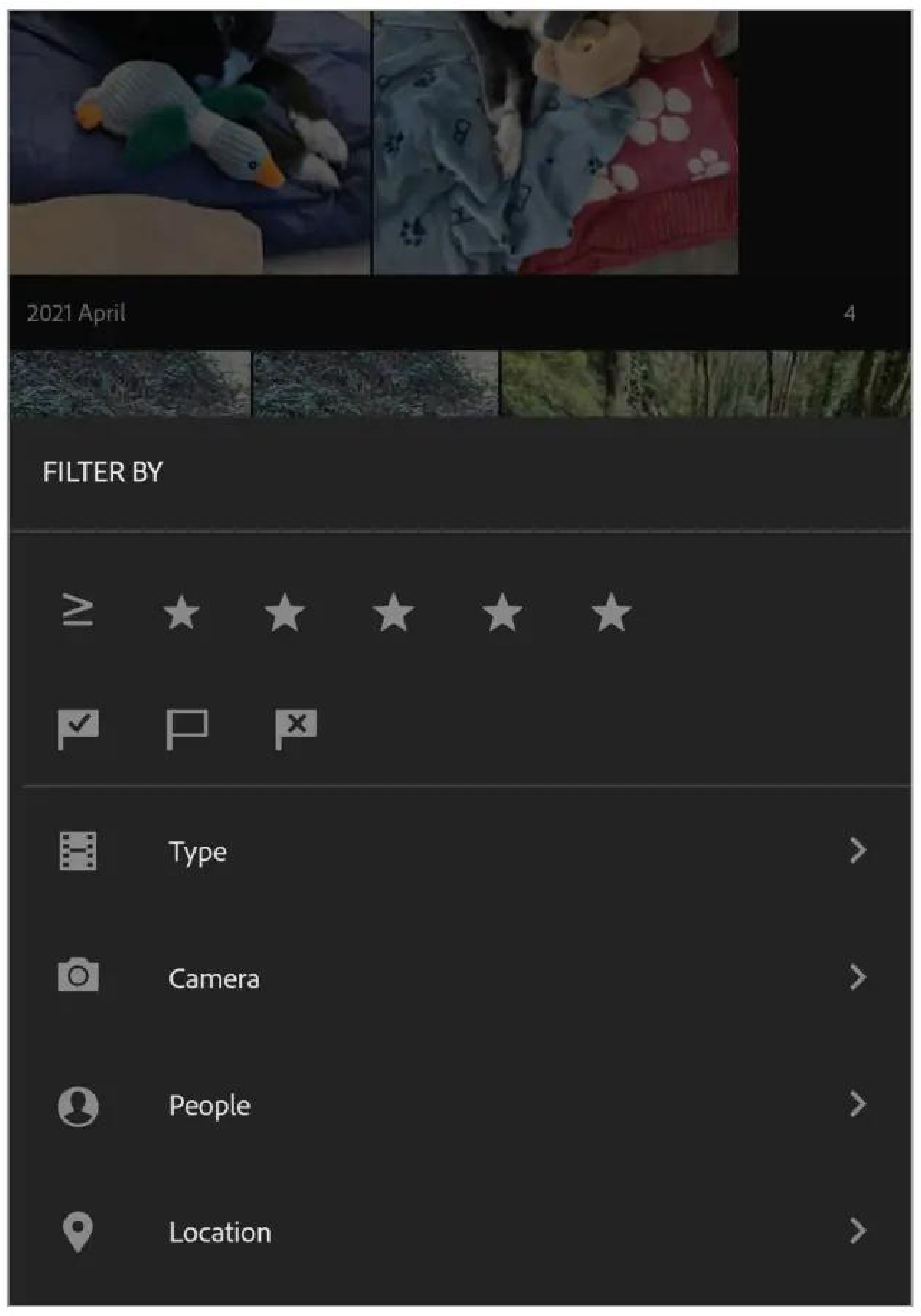
4 The second method available to you is to tap the Album to enter it, then tap the Add Photos button at the bottom of the screen and choose images from there. Either way, you can now select the images you want to add to the new Album by selecting each in turn and tapping the Add button.



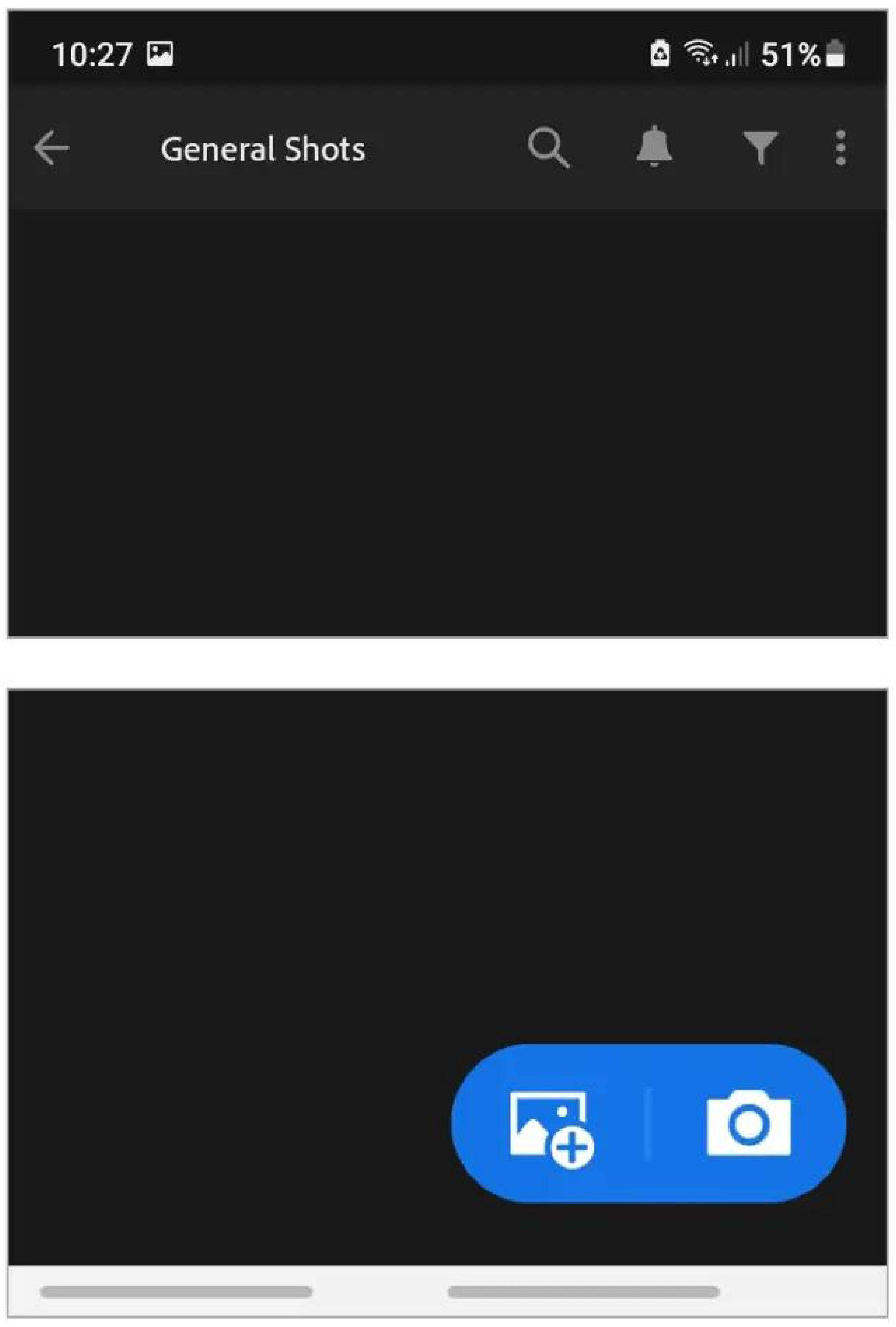
5 The photos can now be added to the Album, and if you have the Lightroom desktop version running, they also begin to sync with the Lightroom app. Notice also, in the Lightroom desktop version, that in the Collections pane you can also select the newly created Album.


10:26
51%
General Shots
2021 May
2021 April
Grid Segmentation
Segment by Month
Sort by Capture Date
Share & Invite
Select
Slideshow
Choose Best Photos
9 photos successfully imported

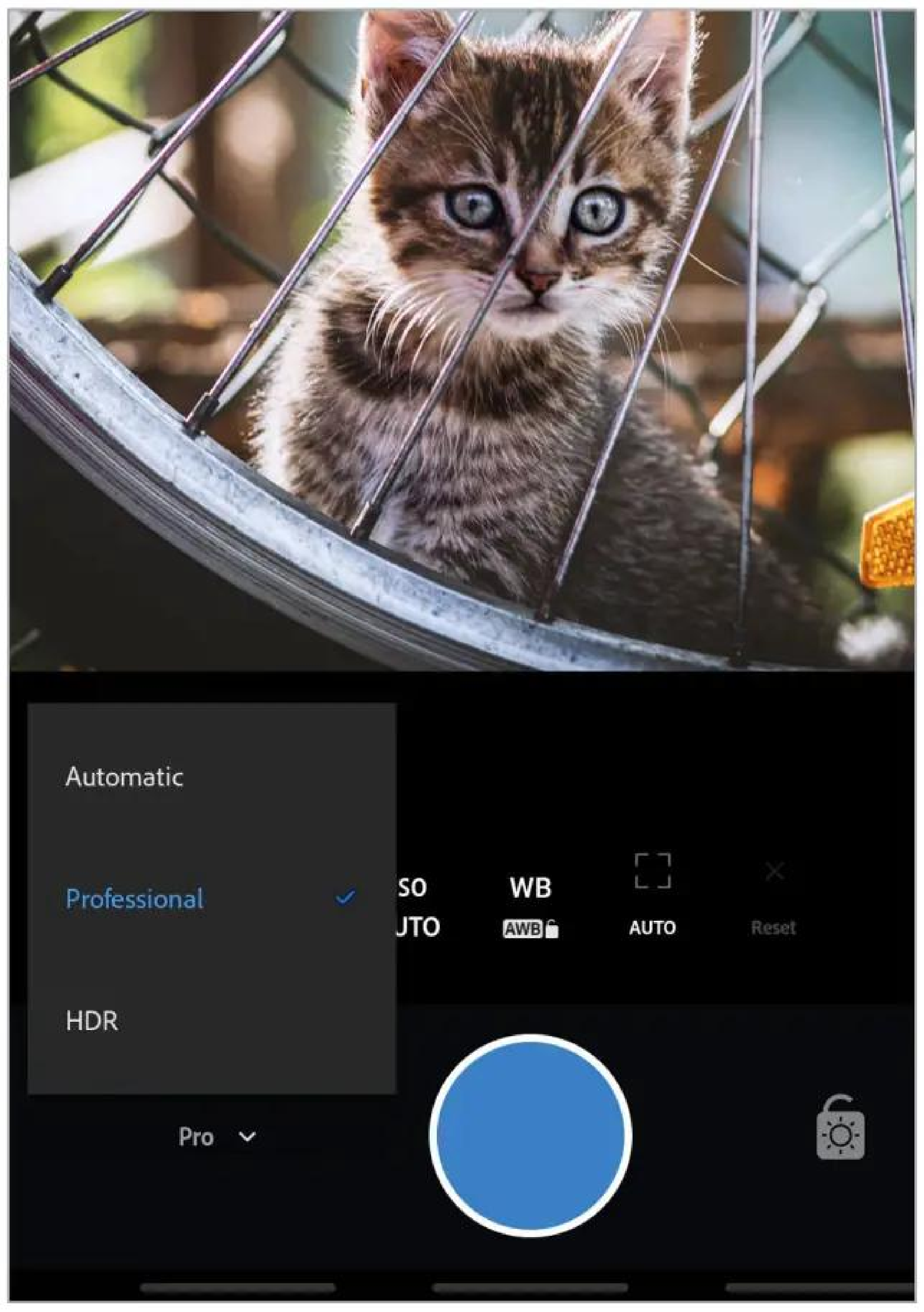
6 With the content of the new Album displayed in Lightroom, tap on the three vertical dots in the upper right corner. Here you can sort the images according to the time they were captured or segment them by Year, Month, Day or Hour. You are also able sort your images in a Grid Segmentation.


2021 April
4
FILTER BY
≥ ★ ★ ★ ★ ★
Type
Camera
People
Location

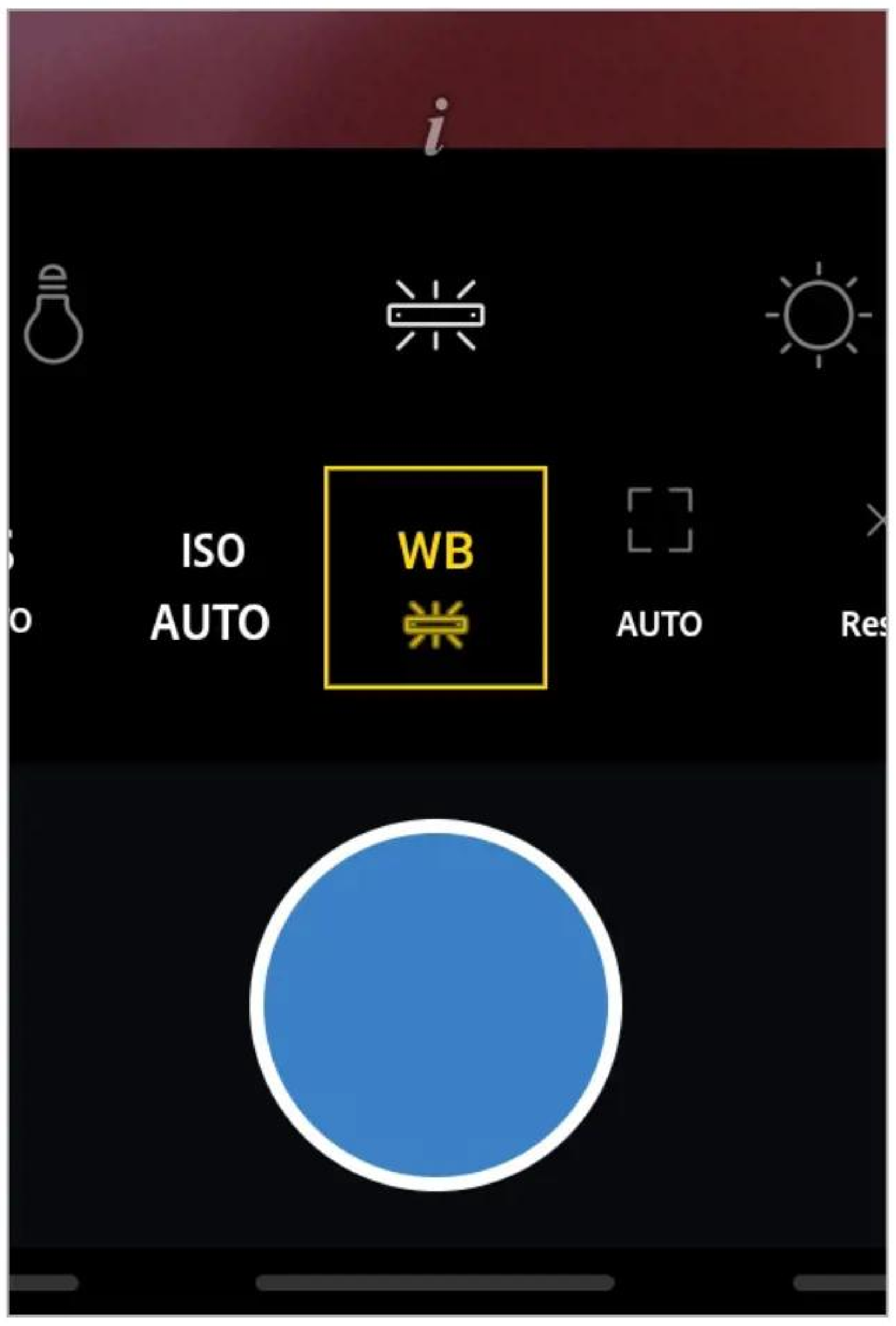
7 To the left of the three vertical dots is a Filter By button. When you tap it the filtering options are displayed and you can choose images based on how they are rated and any that are unflagged, picked or rejected; all depending on how you further personalise each of the images that you've added.


10:27
51%
General Shots

8 If you want to add photos directly from the camera, tap on the back arrow in the upper left of the Album, to return you to the Lightroom start interface. Now create a new Album, and give it a suitable filename and then, instead of adding photos, tap to enter the new Album.


Automatic
Professional
HDR
SO
UTO
WB
AWB
AUTO
Reset
Pro

9 At the bottom of the screen, next to the Add Photos button is a Camera button. Tap this and you can activate the device's camera. Use the top right icon to change from the front to rear camera, and vice-versa, the lightning icon to activate the flash and X to close the camera screen.

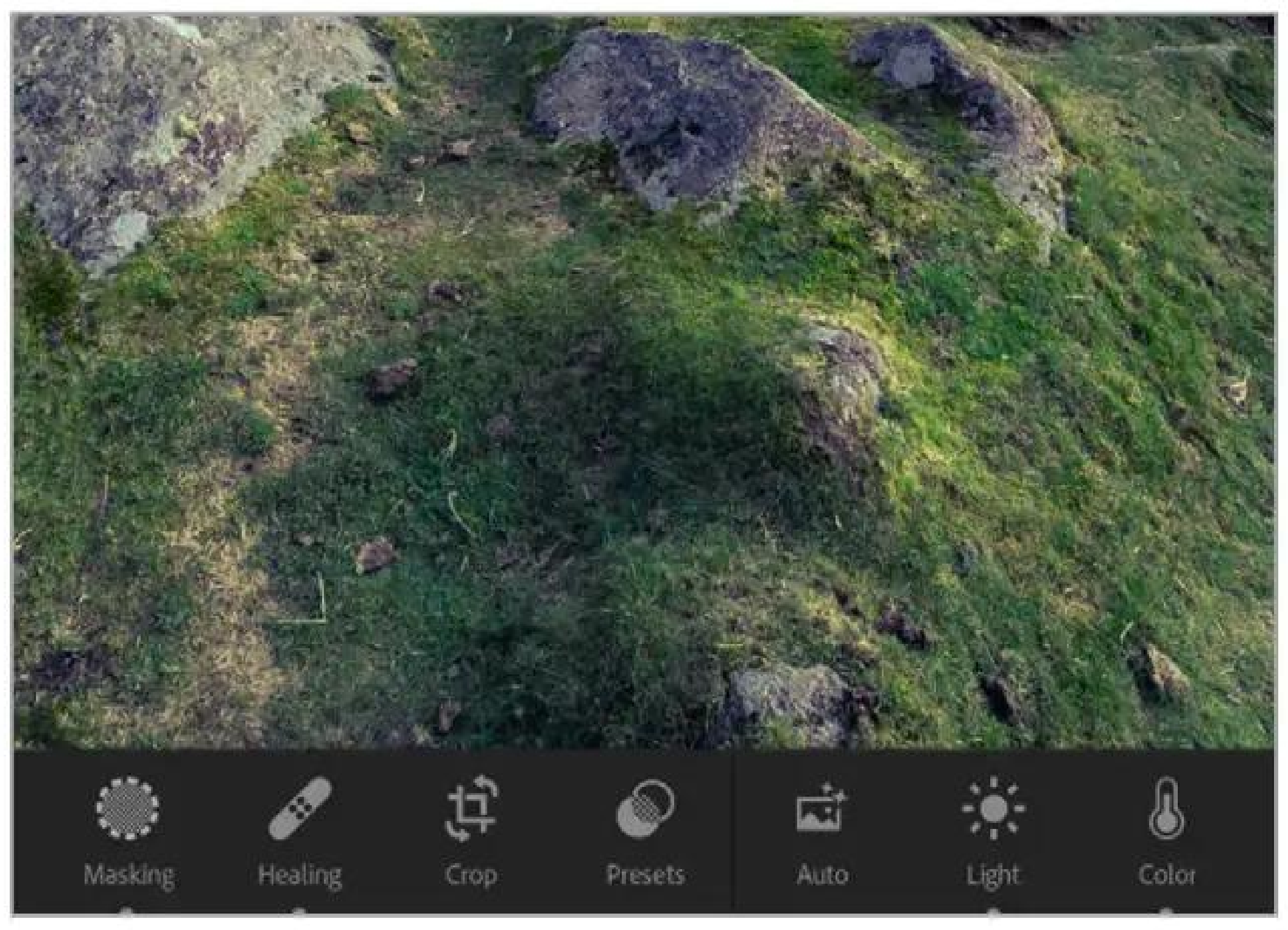

ISO
AUTO
WB
AUTO
Res

10 The Auto function at the bottom of the screen will automatically make image adjustments. Tap this to open the Professional option, and specify your own adjustments. The other buttons open the auto-exposure and colour modes. To take the picture, tap the blue circle and the photo will be added to the Album.

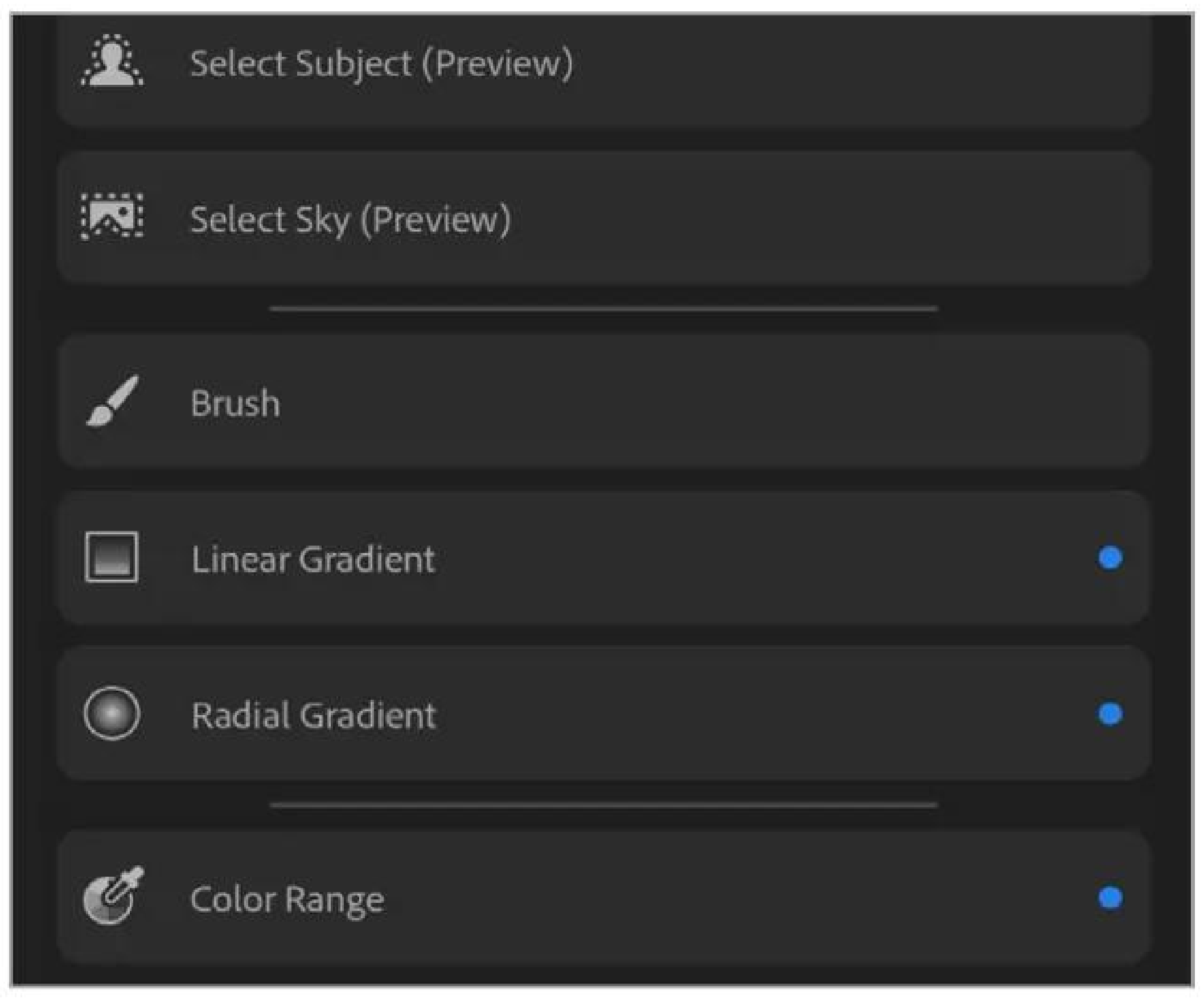
Image Editing On the Go

Lightroom also enables you to do complex edits whilst out and about. The main editing process no longer has to be in the desktop version. The mobile focused Lightroom version has all the powerful features you need to help you achieve impressive results.

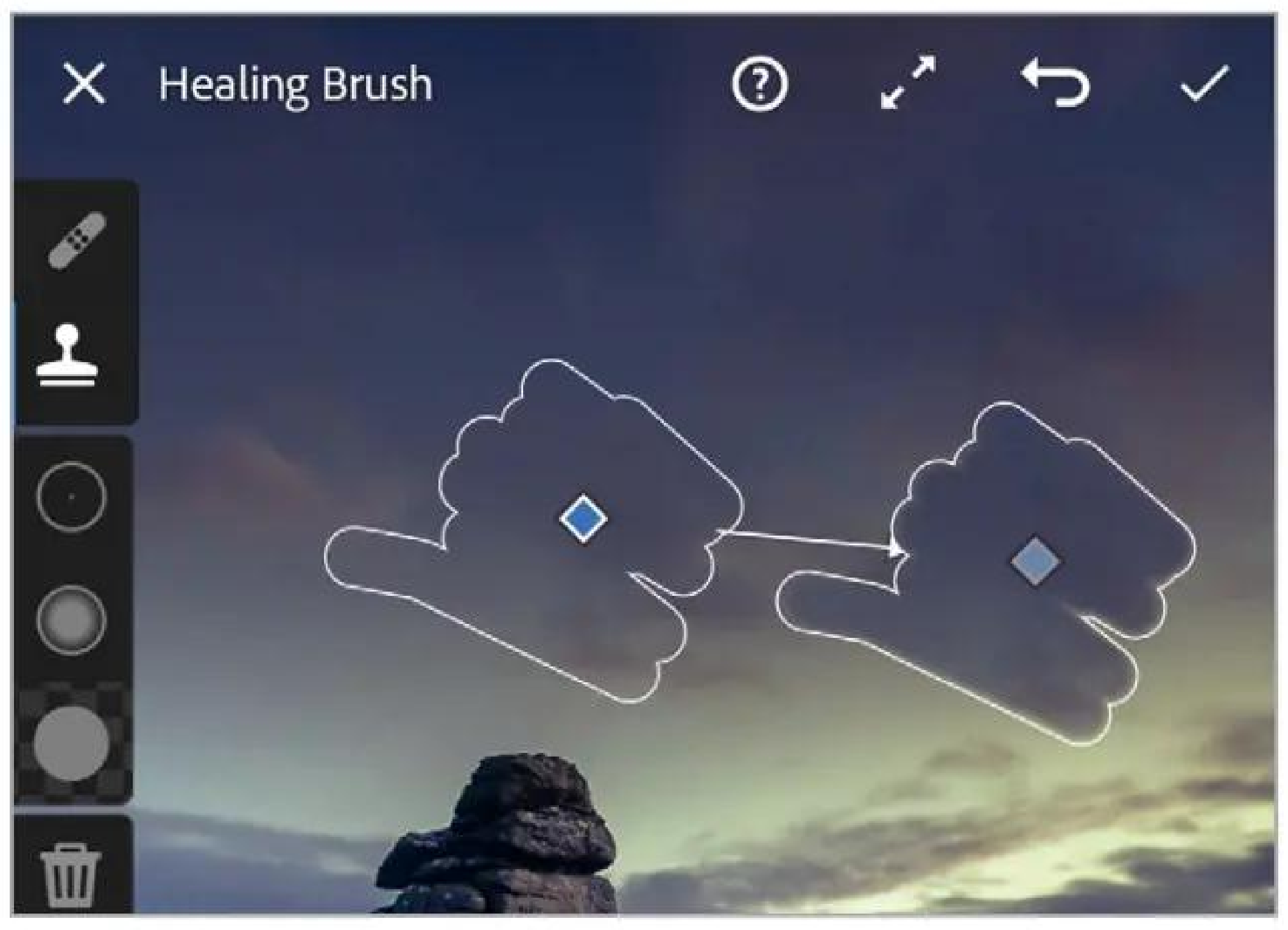
1 First you need to browse your images and find a photograph that is in need of some editing. Pick any from the Albums you currently have, or take a new image via the camera function on your phone and add it to an Album. When you're ready, you can tap the image to select it to begin editing.



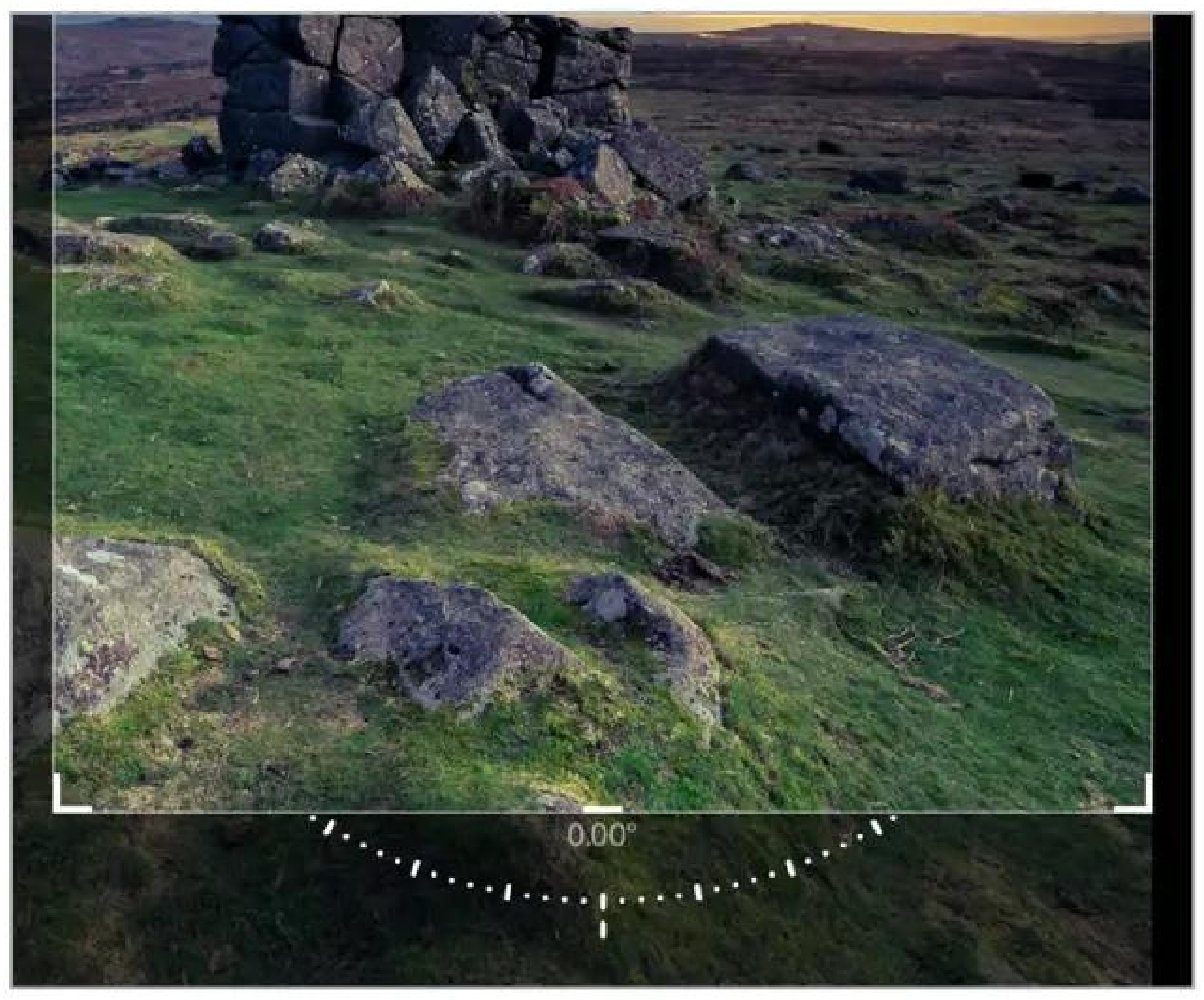
2 When the image is loaded, notice that the editing tools are spread across the bottom of the screen in a strip. You can change images, if there's more than one in the Album, by swiping left and right. For now though, tap on the first editing option, Masking. Masking is the latest update to the Lightroom app.



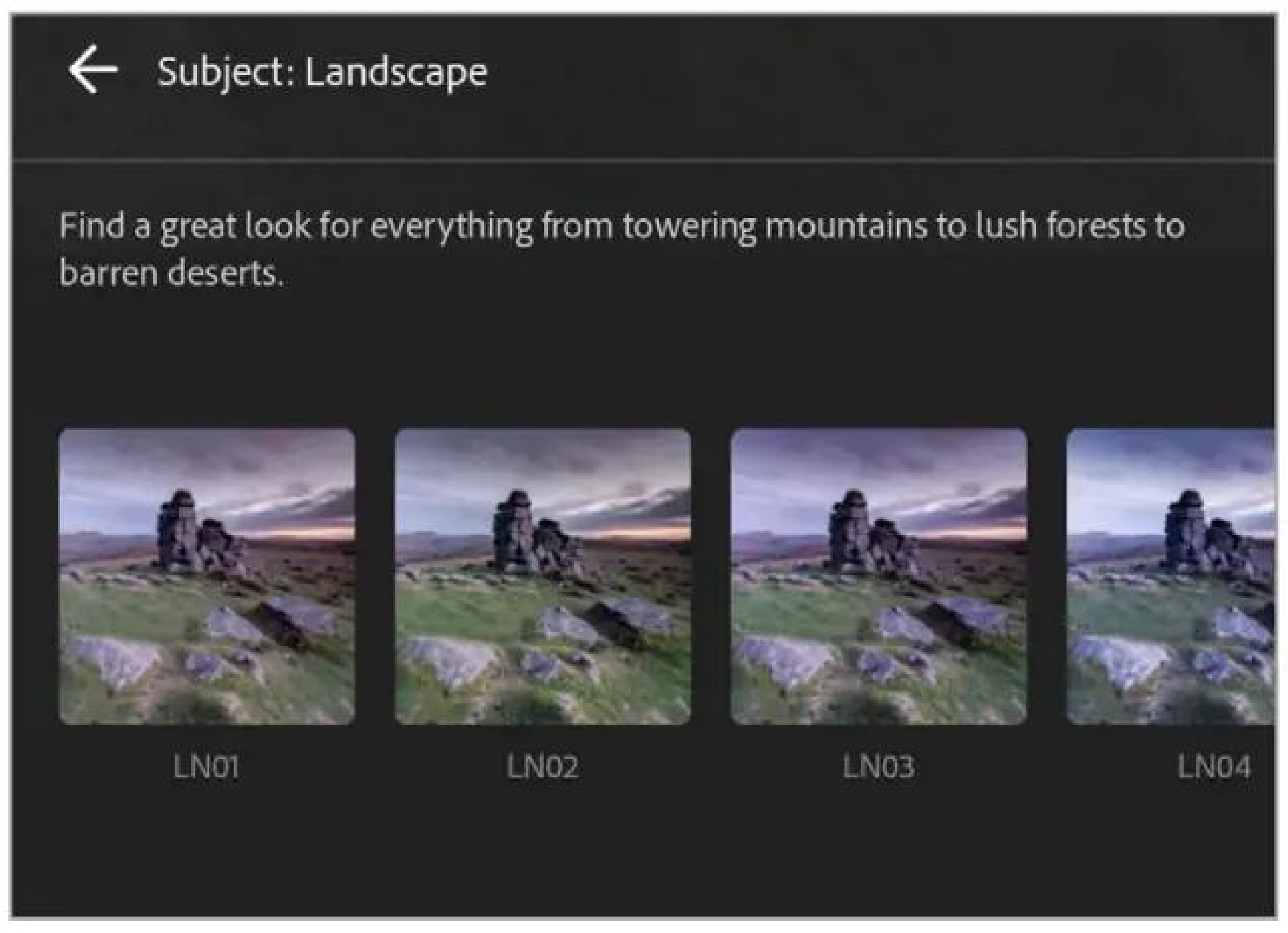
3 The Masking tool enables you to specify an area on the image for enhancing using one of a number of selection options. When you have made your selection choice, you can apply exposure, contrast, highlights, shadows and other adjustments. You can easily revert any changes by tapping the Reset button.



4 The next option is the Healing Brush. You can draw on the screen of your mobile device and specify an area you want to clone or heal. This can be used to remove spots and blemishes from an image by copying data from another part of the image and pasting it over your target area.

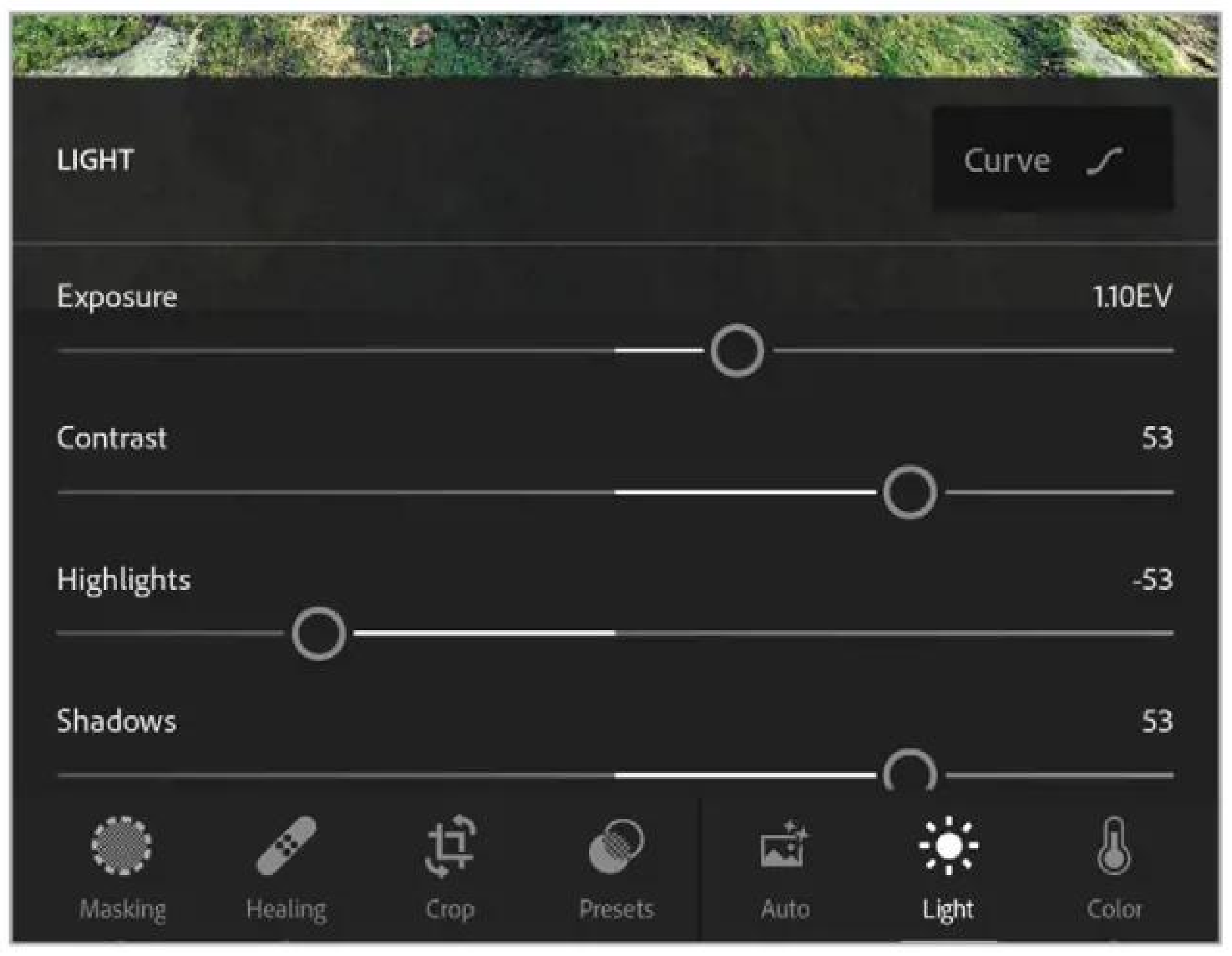


5 The next option, Crop, is self-explanatory. However, it offers more than the simple cropping of an image that some mobile image editors manage. The Crop tool not only crops but also rotates, flips horizontally and vertically and can snap to grid. It's worth playing around with the image to see how it works.



Find a great look for everything from towering mountains to lush forests to barren deserts.

6 The Presets option comes next and here you can apply numerous ready-made adjusmtents and colour enhancements to your original picture. There are a number of different Presets available, with sub-categories within each. With each Preset applied, you can tap to see a before and after shot.


LIGHT

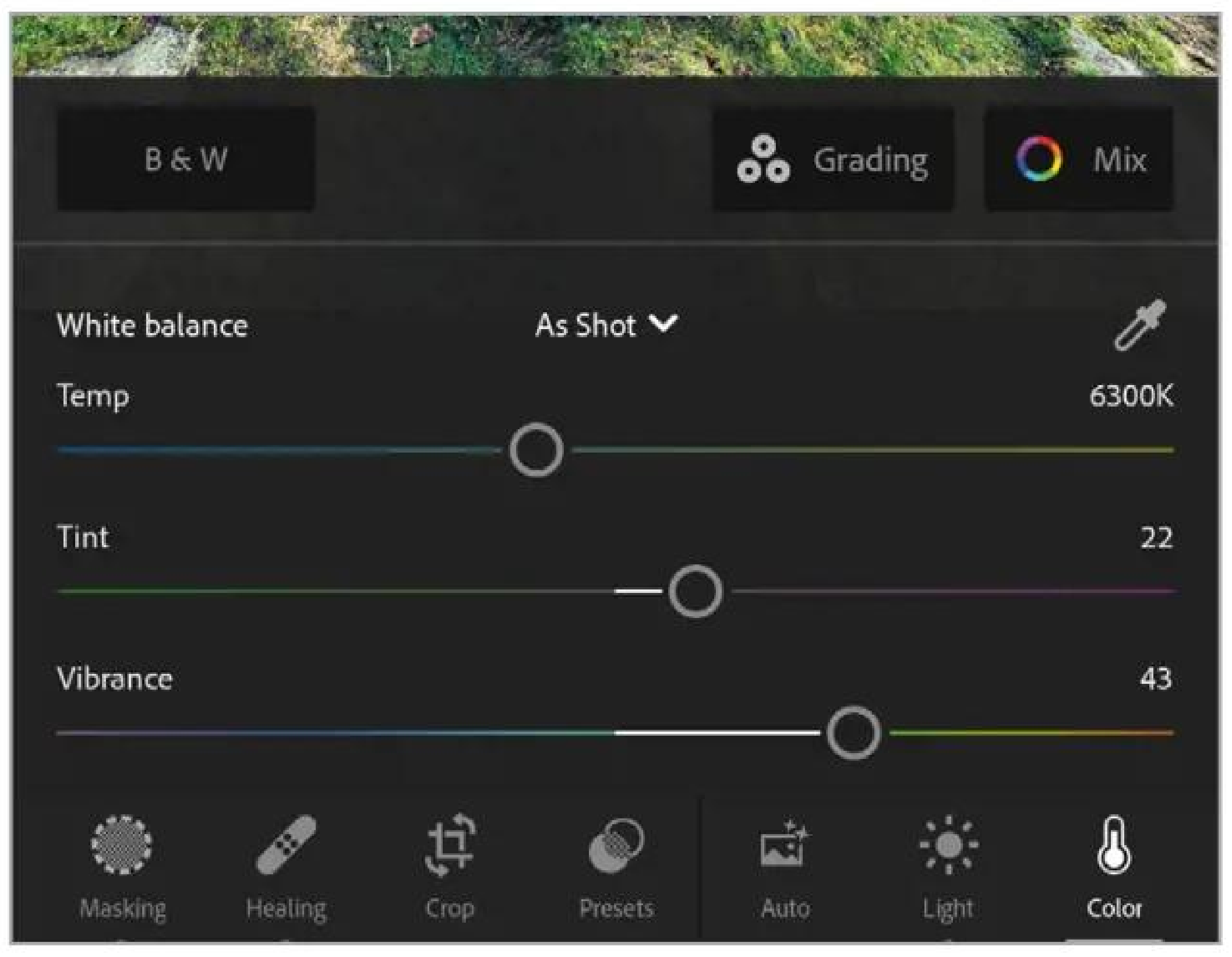
Exposure 1.10EV

Contrast 53

Highlights -53

Shadows 53

Curve
Masking
Healing
Crop
Presets
Auto
Light
Color


White balance As Shot

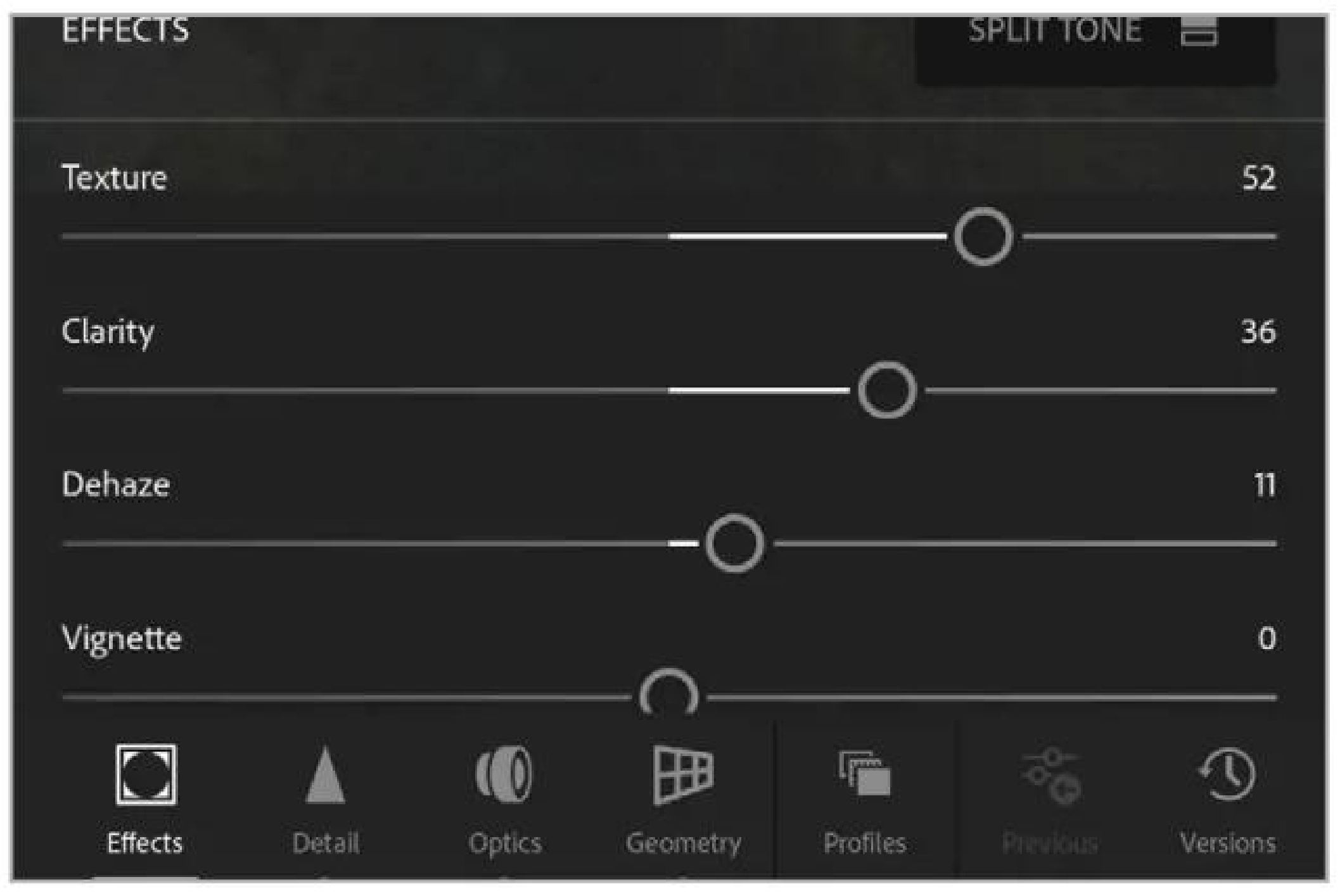
Temp 6300K

Tint 22

Vibrance 43

B & W
Grading
Mix
Masking
Healing
Crop
Presets
Auto
Light
Color

7 The next options are Light and Colour. In the Light section, you're able to adjust the exposure, contrast, highlights, shadows, whites and blacks. The Colour section concentrates on adjustments to colour temperature, tint, vibrancy and saturation. You can also convert the image to black and white.


EFFECTS

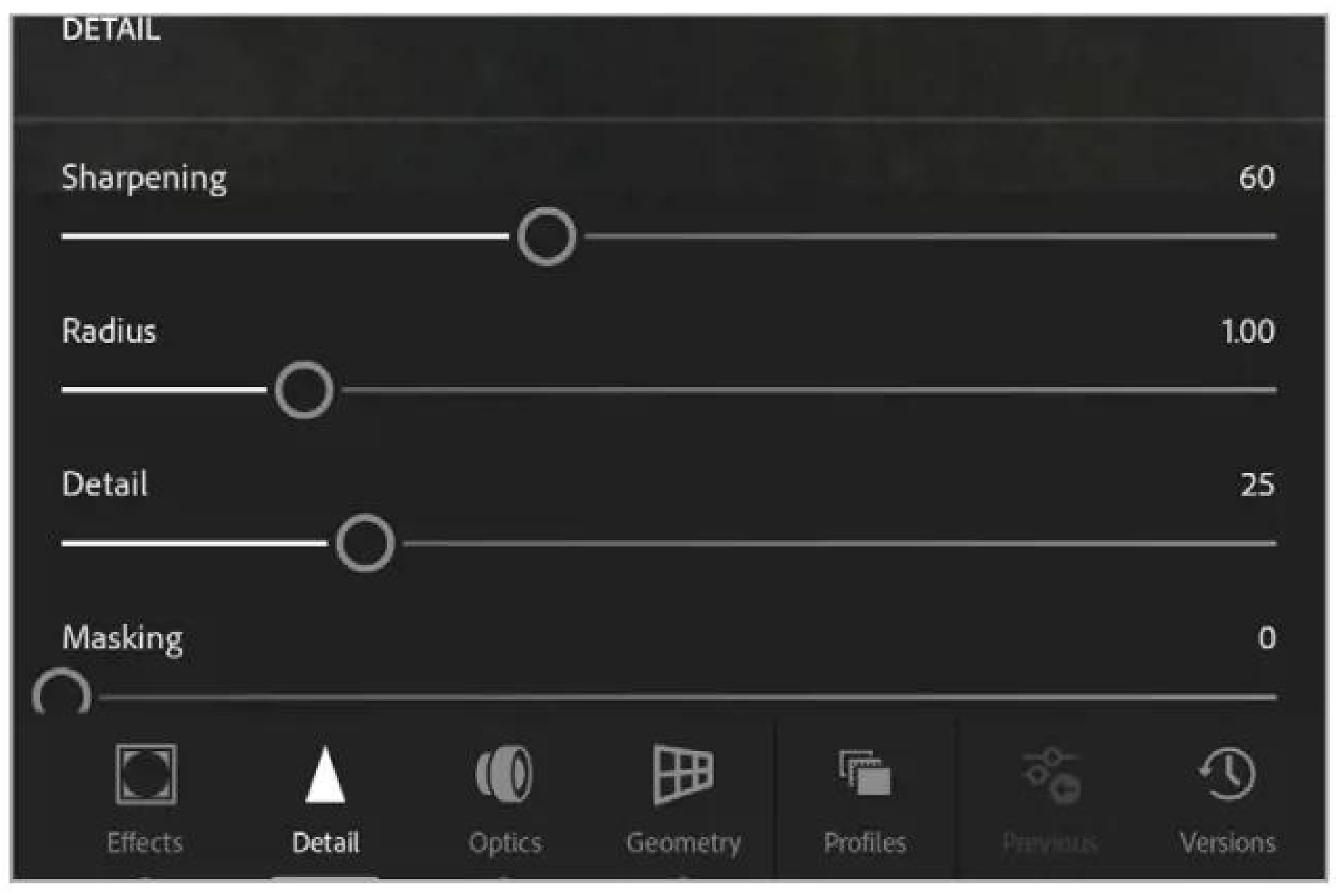
Texture 52

Clarity 36

Dehaze 11

Vignette 0

SPLIT TONE
Effects
Detail
Optics
Geometry
Profiles
Previous
Versions


DETAIL

Sharpening 60

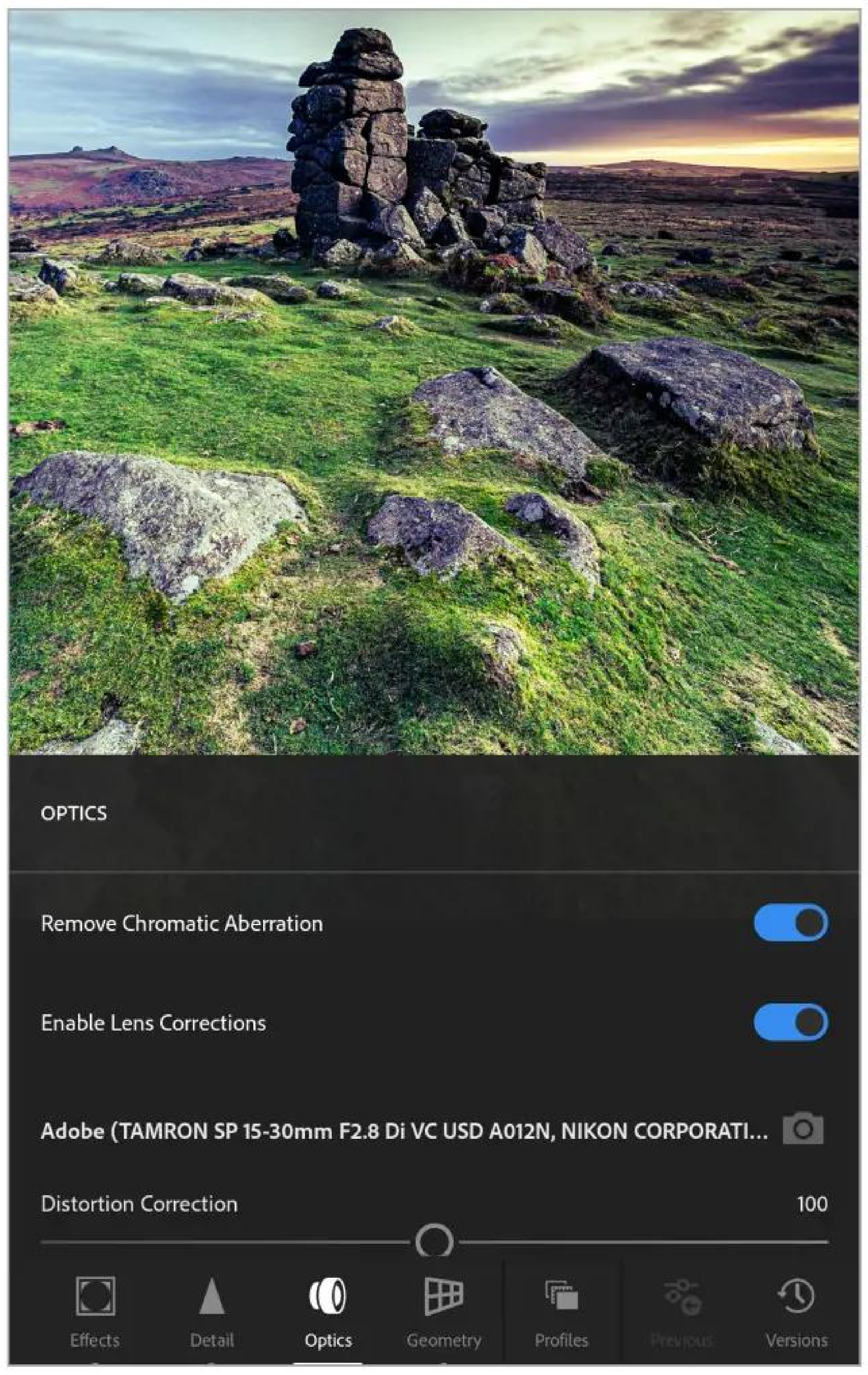
Radius 1.00

Detail 25

Masking 0

Effects
Detail
Optics
Geometry
Profiles
Previous
Versions

8 The Effects and Detail options are next. Effects govern texture and clarity, along with dehaze, vignette amount, midpoint, feather, roundness and highlights for the image. You can also add a split otne effect. Detail lets you control how much sharpening, radius and detail is applied to the image.


OPTICS

Remove Chromatic Aberration

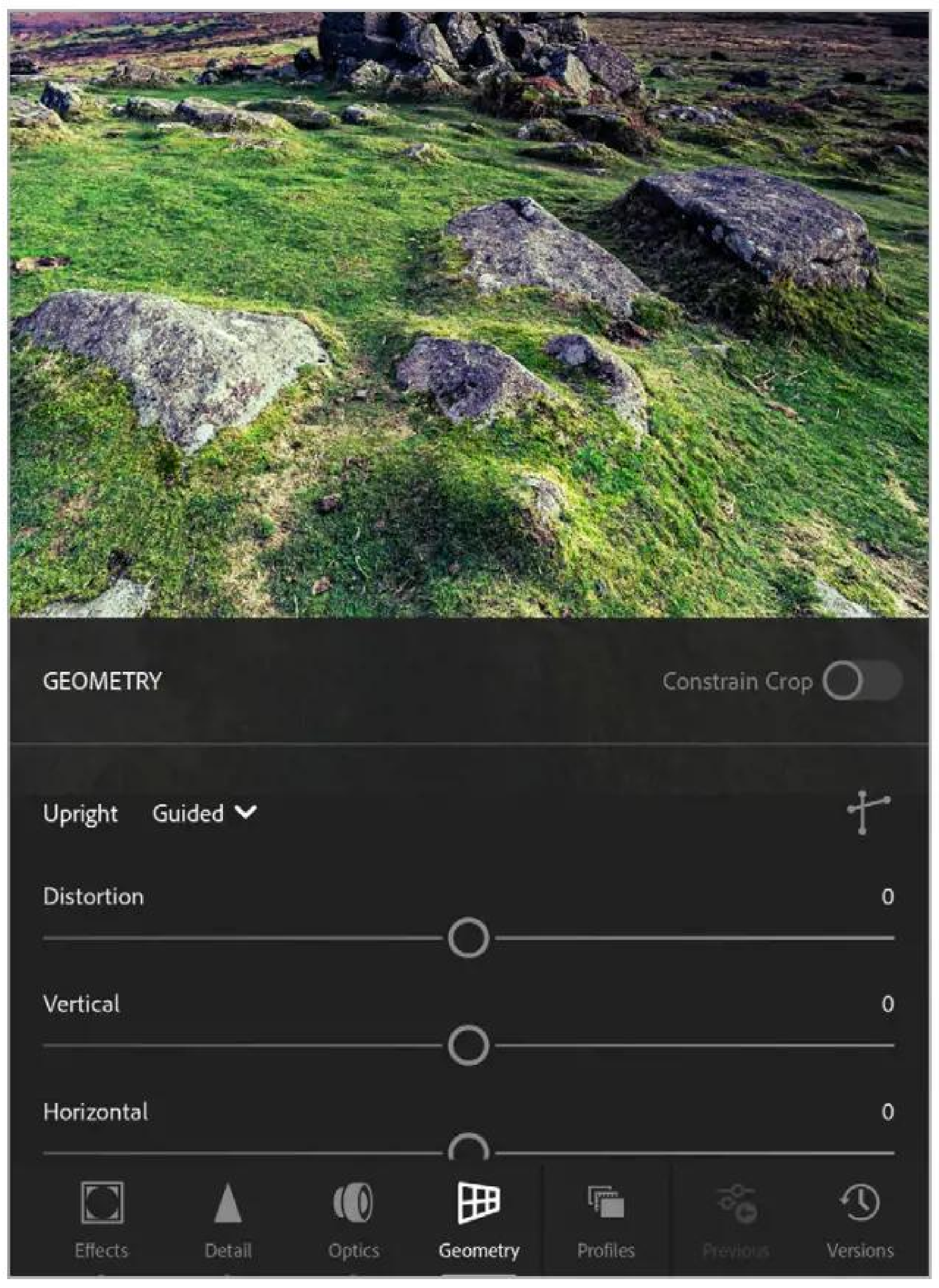
Enable Lens Corrections

Adobe (TAMRON SP 15-30mm F2.8 Di VC USD A012N, NIKON CORPORATI...

Distortion Correction 100

Effects
Detail
Optics
Geometry
Profiles
Previous
Versions

9 The next tool, Optics, is a technique used in most Adobe products. It corrects common lens aberrations such as barrel and pincushion distortion. Next to that is the image Geometry distortion tool. This lets you alter the vertical and horizontal geometry of your image.


GEOMETRY

Constrain Crop

Upright Guided

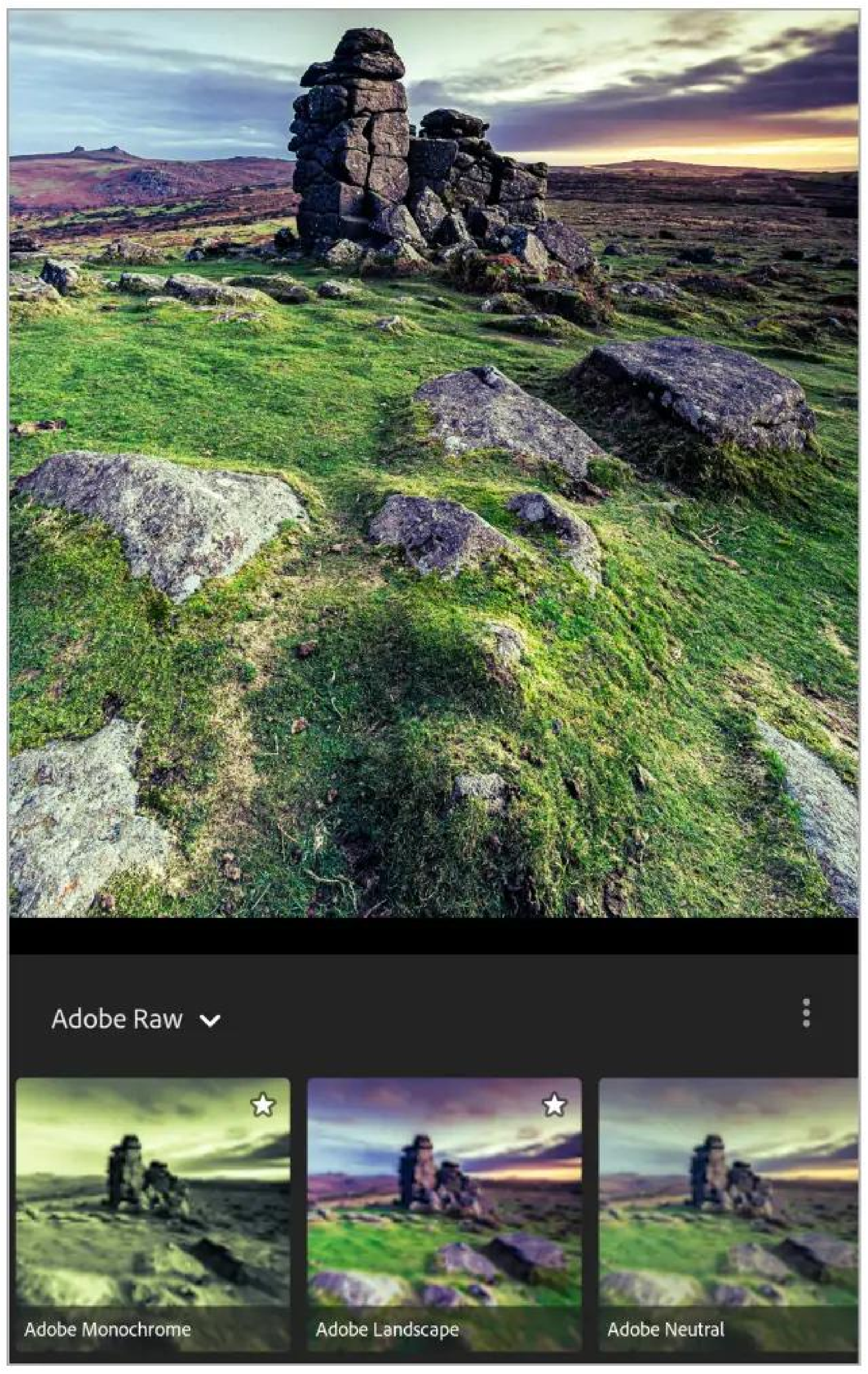
Distortion 0

Vertical 0

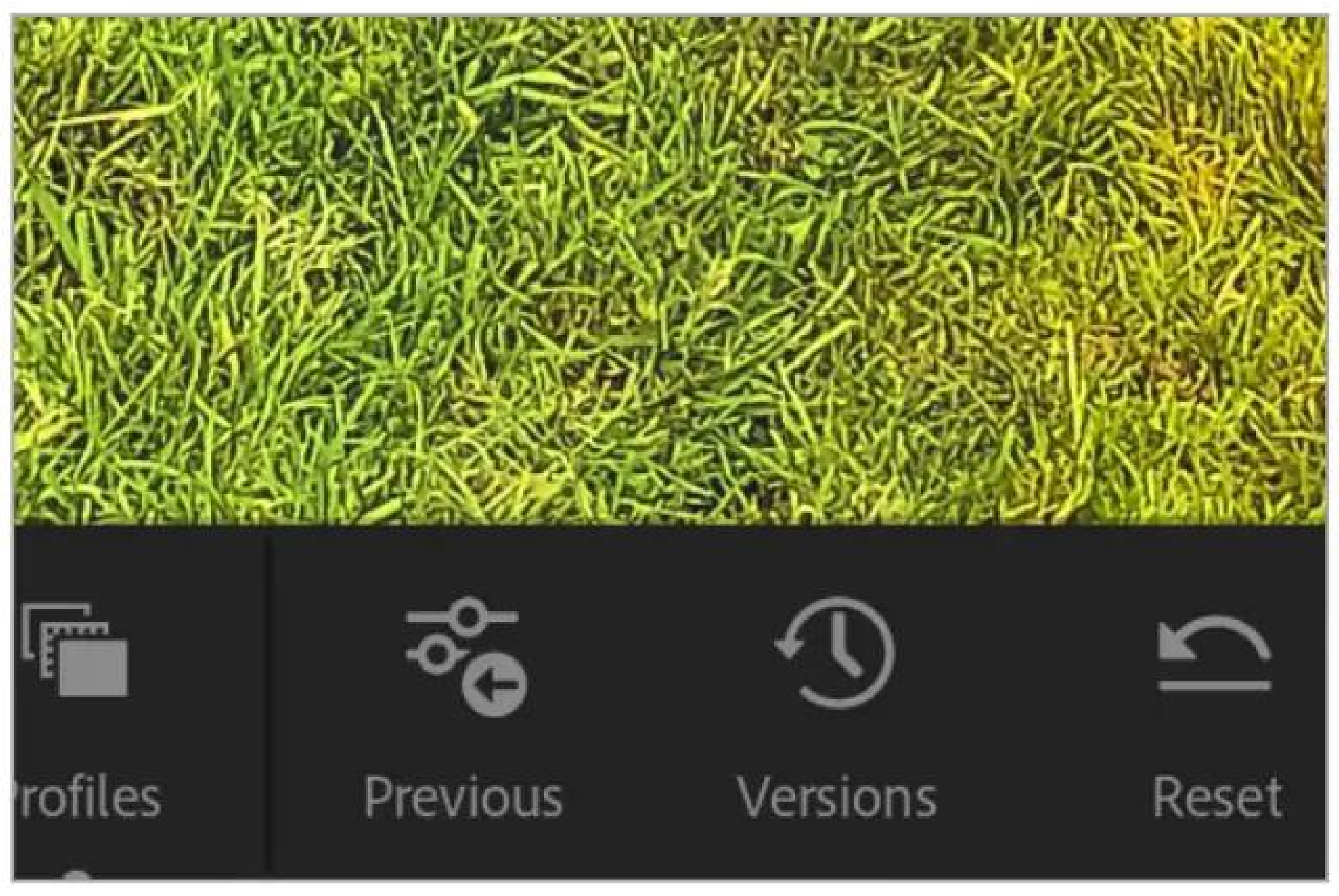
Horizontal 0

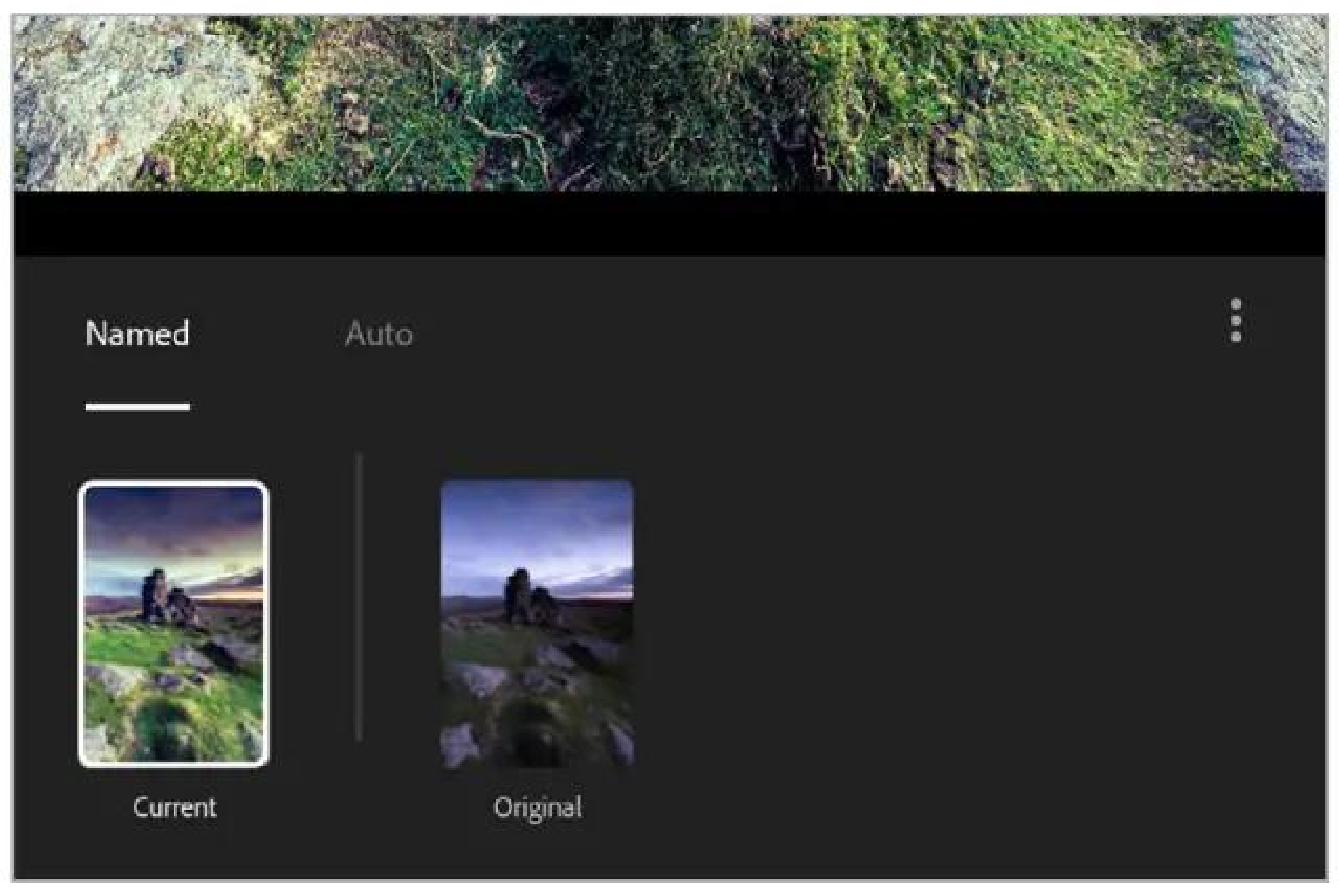
Effects
Detail
Optics
Geometry
Profiles
Previous
Versions

10 Next in the list is the Geometry function. This lets you add distortion that can straighten out images with converging perspectives on either the vertical plane or the horizontal. You are also able to rotate the image. There is also a guided straighten feature.


Adobe Raw
Adobe Monochrome
Adobe Landscape
Adobe Neutral

11 Up next in the list of editing tools are the Profiles. They are a collection of colour profiles that offer one-click colour processing to your photos, similar to Presets. They range from Adobe Raw, Artistic, Black and White, Modern and Vintage. Each category has a number of profiles.

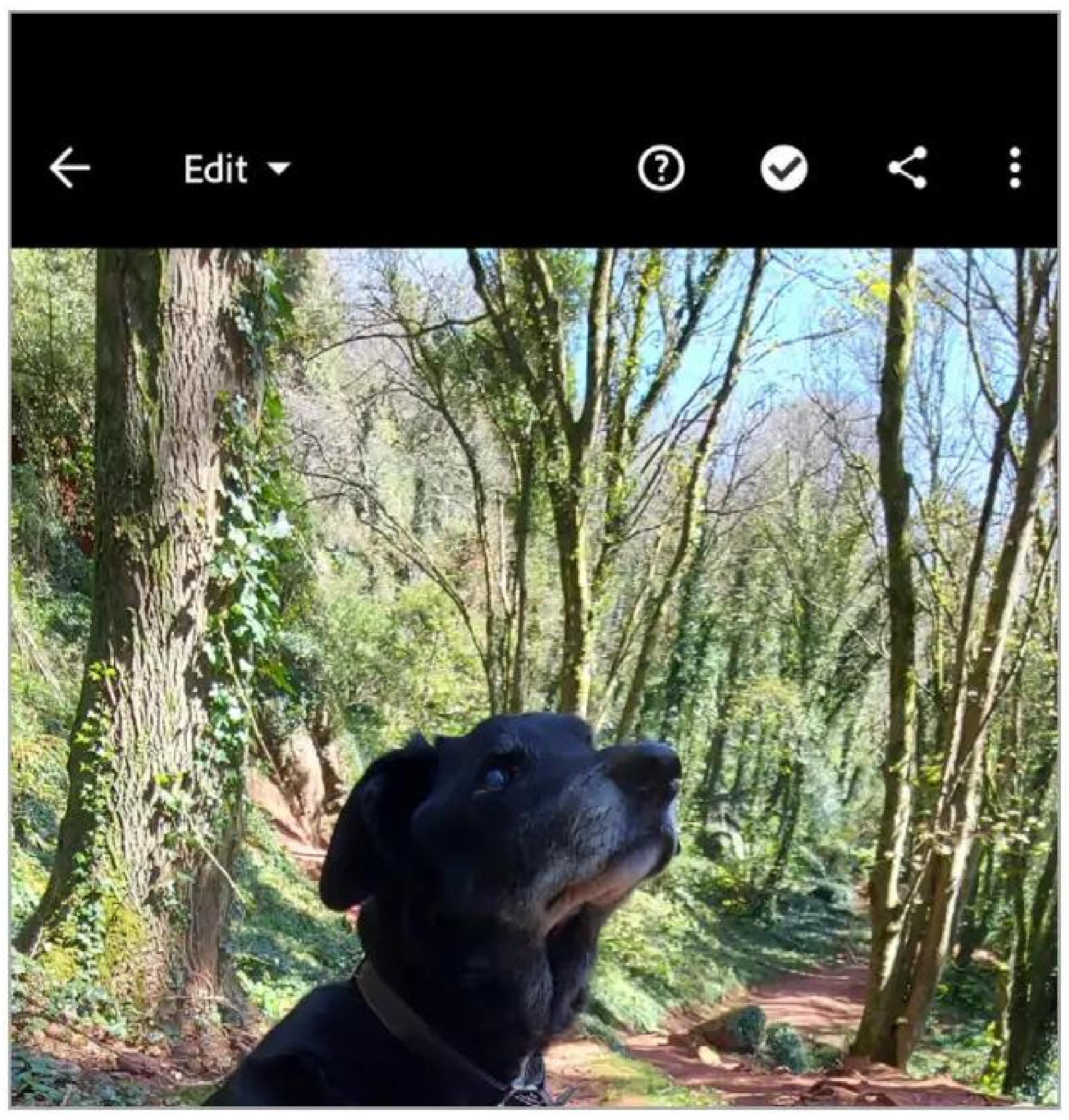

rofiles
Previous
Versions
Reset

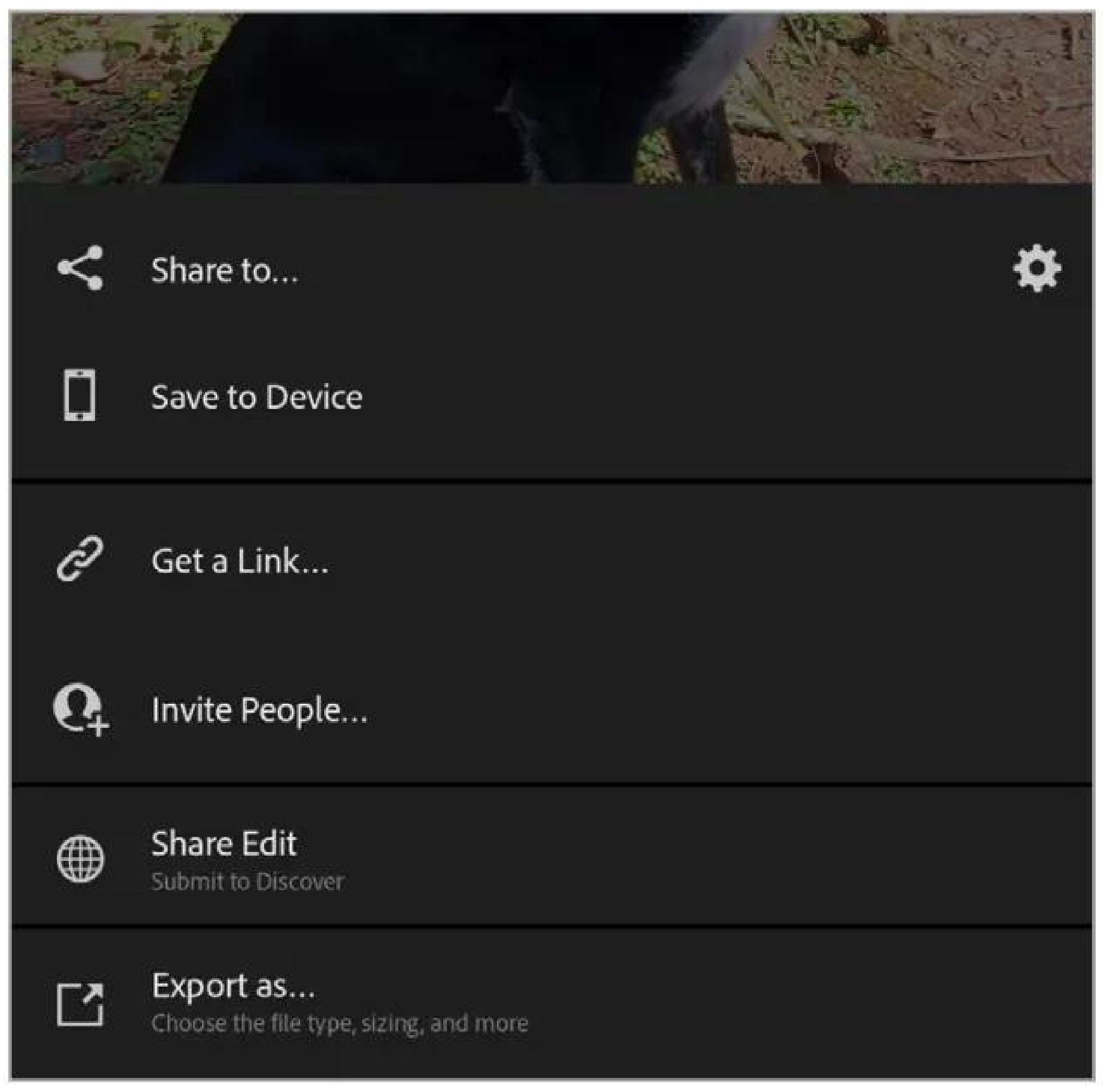

Named
Auto
Current
Original

12 The last three are Previous, which lets you view previous edits made to the image via a set of small thumbnails. Versions is a feature that lets you create snapshots of the work in progress on your image, which you can return to by clicking one. Reset clears all your edits from the current session.

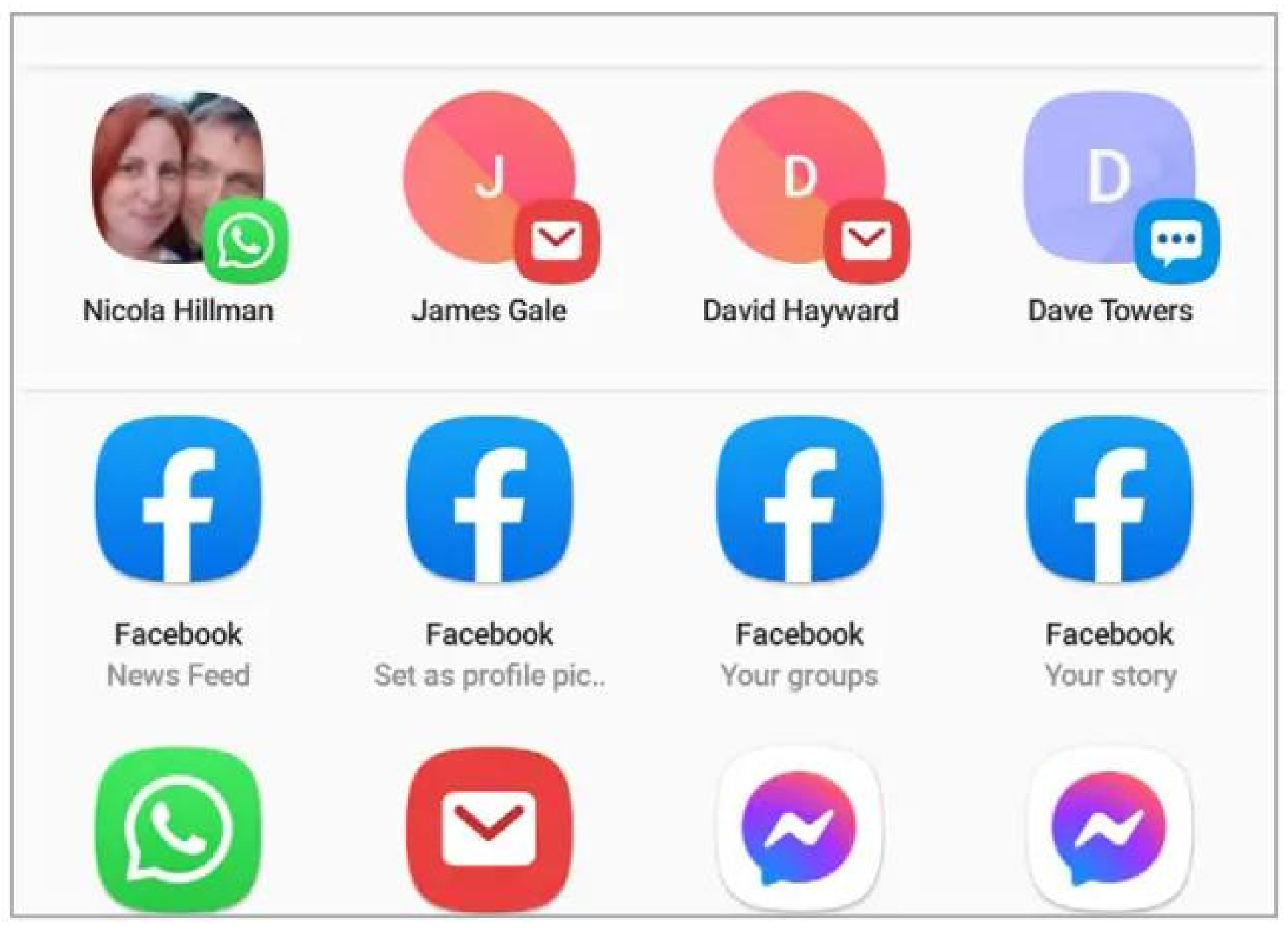
Sharing Your Lightroom Photos

Taken the perfect shot? Edited your original image to something amusing, amazing or inspiring? Then share it with your friends and family via social media, email or other platforms that you've already set up on your device.

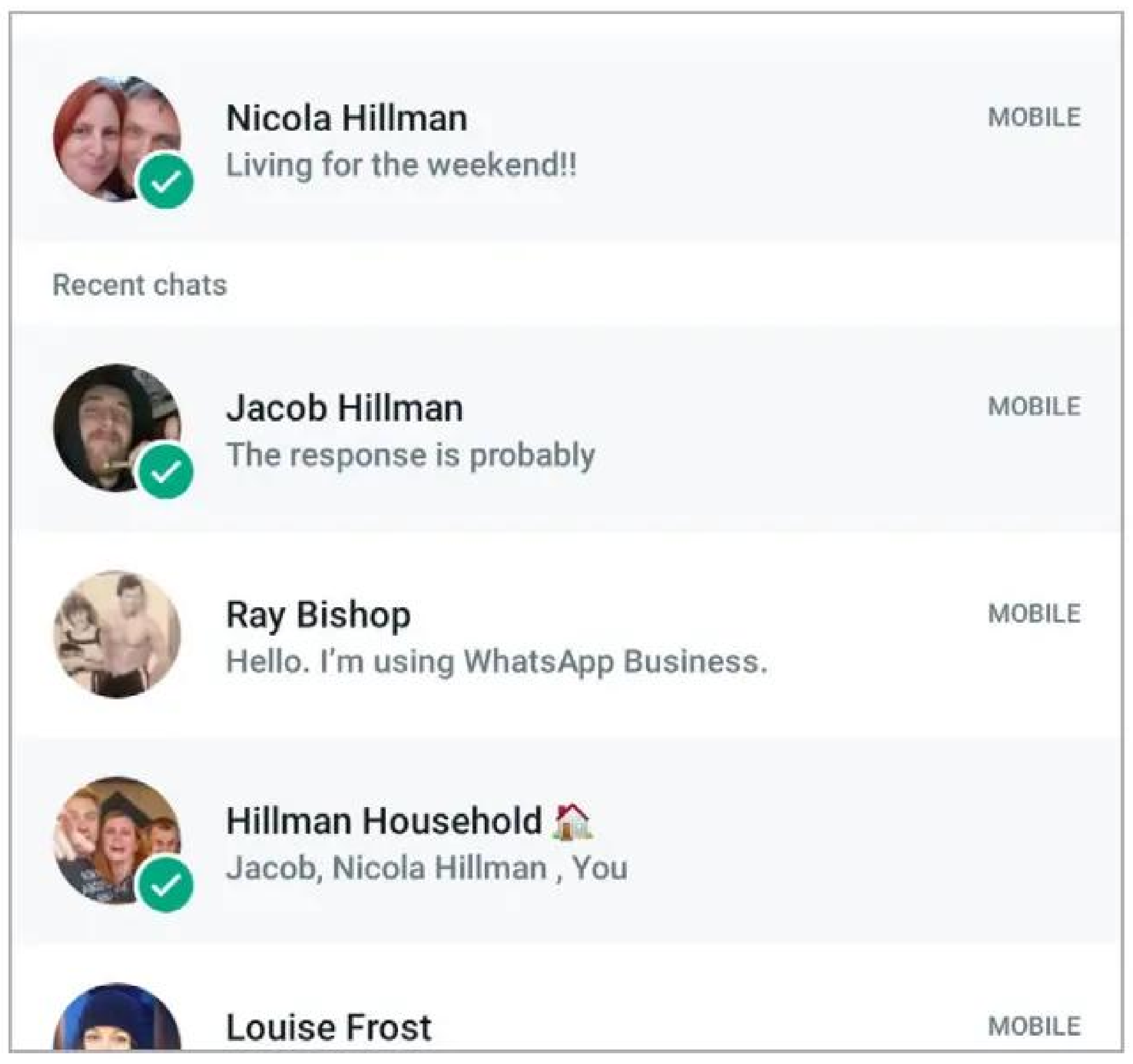



Share to...
Save to Device
Get a Link...
Invite People...
Share Edit
Submit to Discover
Export as...
Choose the file type, sizing, and more

1 The most basic level of sharing is a good place to start this tutorial. To begin with, select an image from within your device's Lightroom app that you want to be able to share. You can see that there's a three pronged share icon next to the three vertical dots in the top right of the interface.


Nicola Hillman
James Gale
David Hayward
Dave Towers
Facebook
News Feed
Facebook
Set as profile pic..
Facebook
Your groups
Facebook
Your story

2 When you tap the Share To... icon, the various apps you already have installed on your device open under the Sharing With menu. You may need to swipe to the right to display further apps capable of receiving the image.


Nicola Hillman MOBILE
Living for the weekend!!

Recent chats

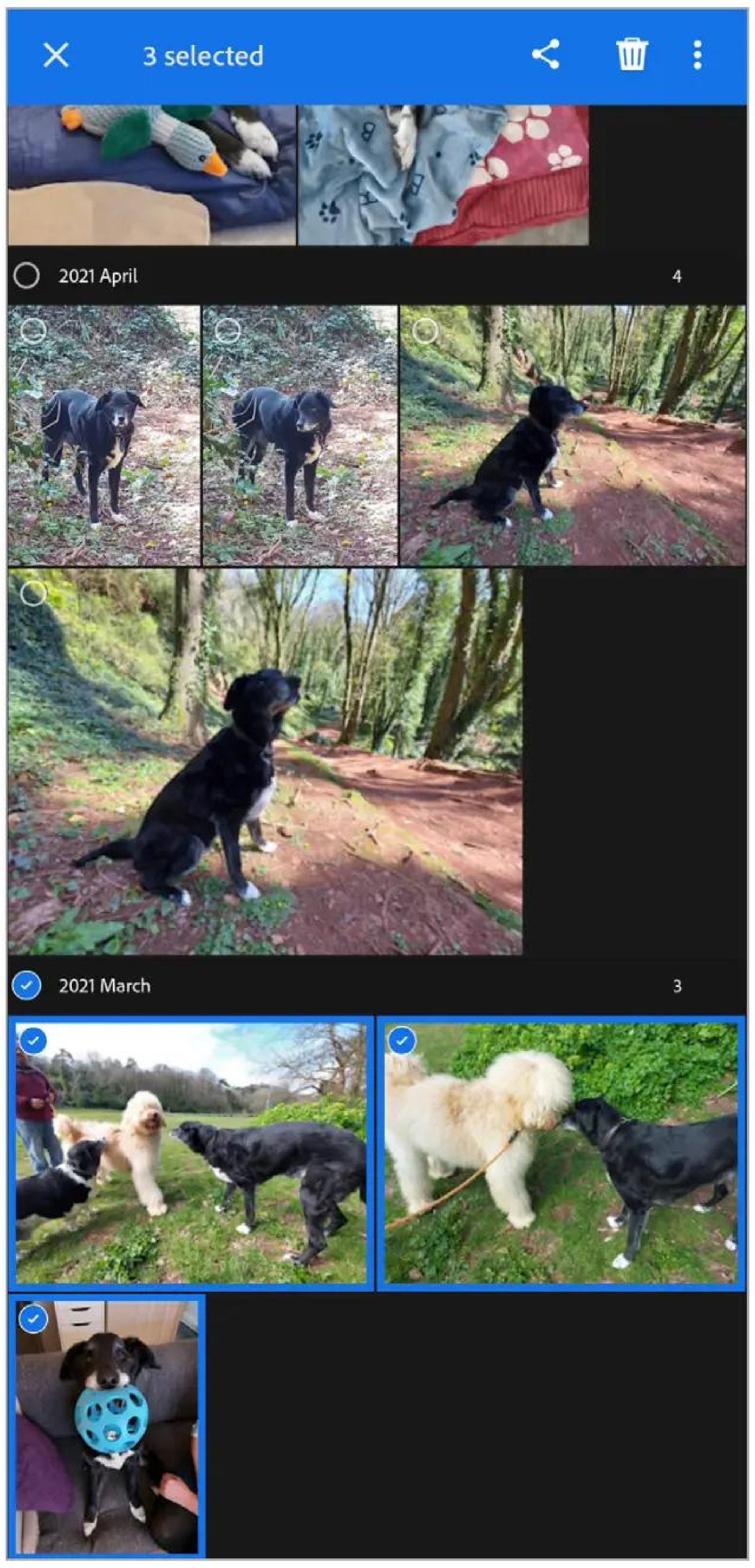
Jacob Hillman MOBILE
The response is probably

Ray Bishop MOBILE
Hello. I'm using WhatsApp Business.

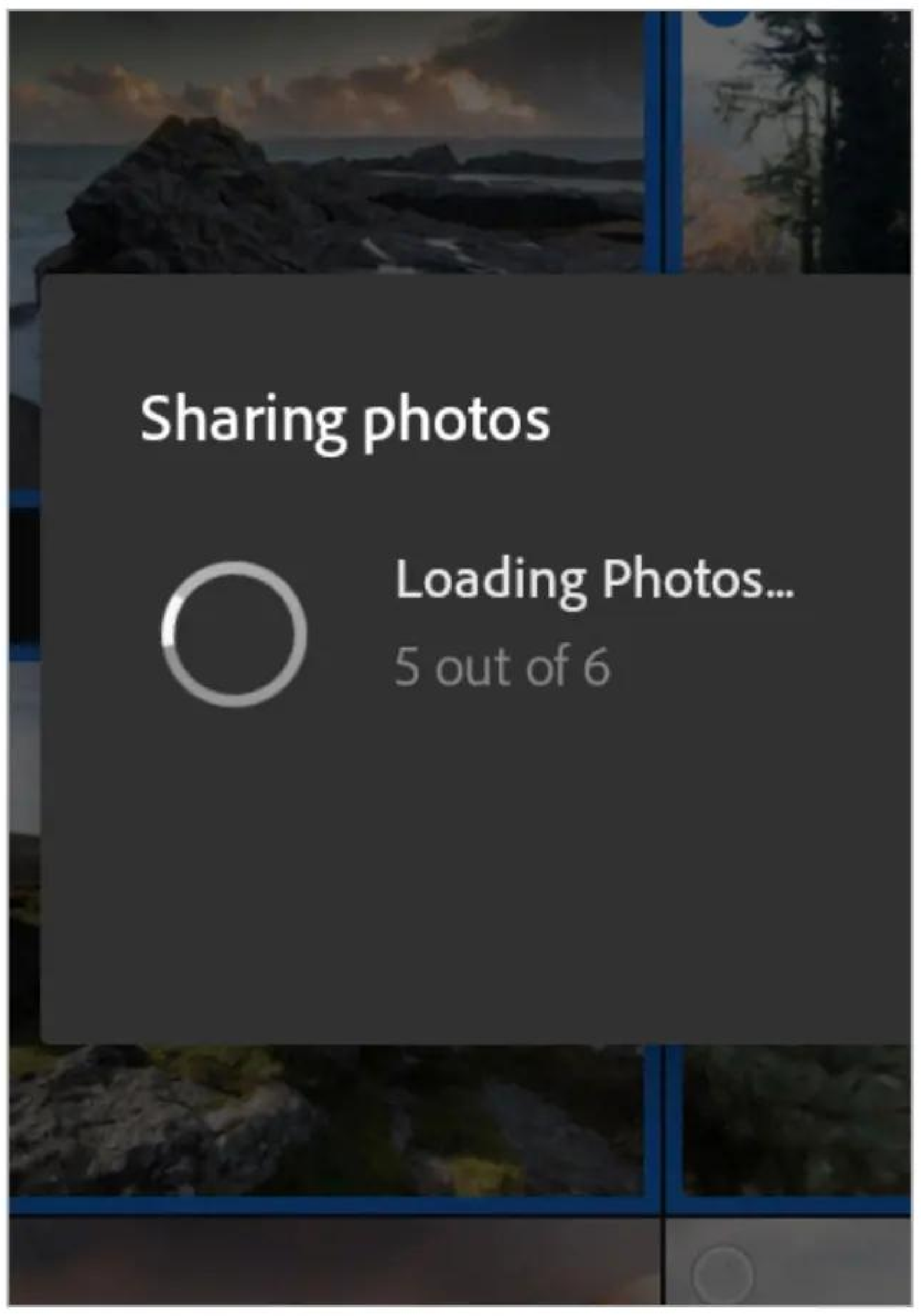
Hillman Household 🏠
Jacob, Nicola Hillman , You

Louise Frost MOBILE

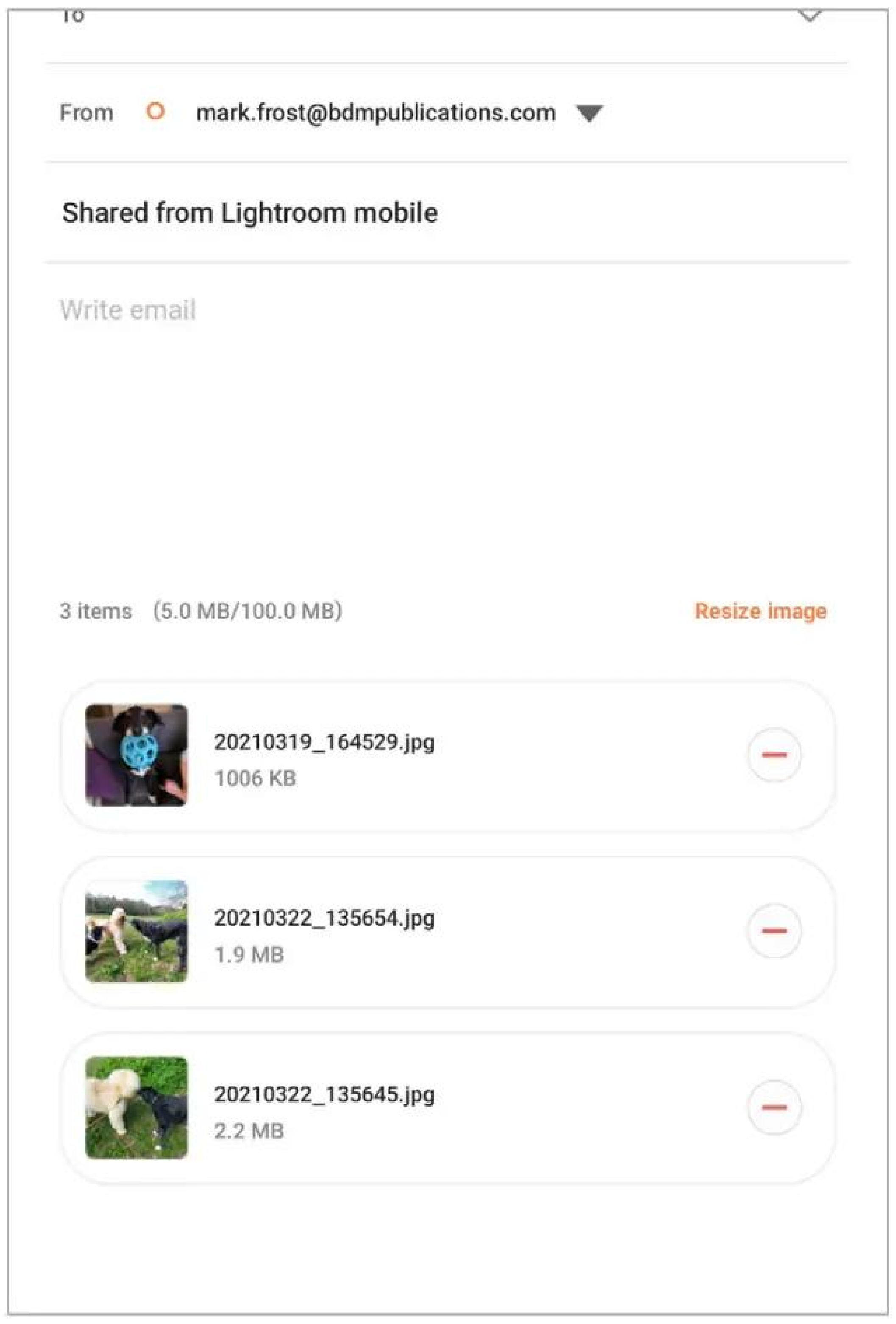
3 Tap the app you want to share the image through. The app will then load, preparing the image in the background ready for sending. If it's an app such as WhatsApp, then you need to specify the person or persons you want to send the image to. It all depends on the app in question.


3 selected
2021 April
4
2021 March
3

4 It's not a problem if you want to share multiple images. Start by opening the Album containing the images you want and long press the first image to select it. Now tap all of the other images you want to send, selecting each with the tick in the top left of the image thumbnail.


Sharing photos
Loading Photos...
5 out of 6

5 Just as before, once you have the images you want to share ready, tap the share icon in the top right corner and select the contacts or apps that you're going to send the images to. Depending on how many images you've selected, it could take some time for them to load within Lightroom ready for sharing.



From mark.frost@bdmpublications.com

Shared from Lightroom mobile

Write email

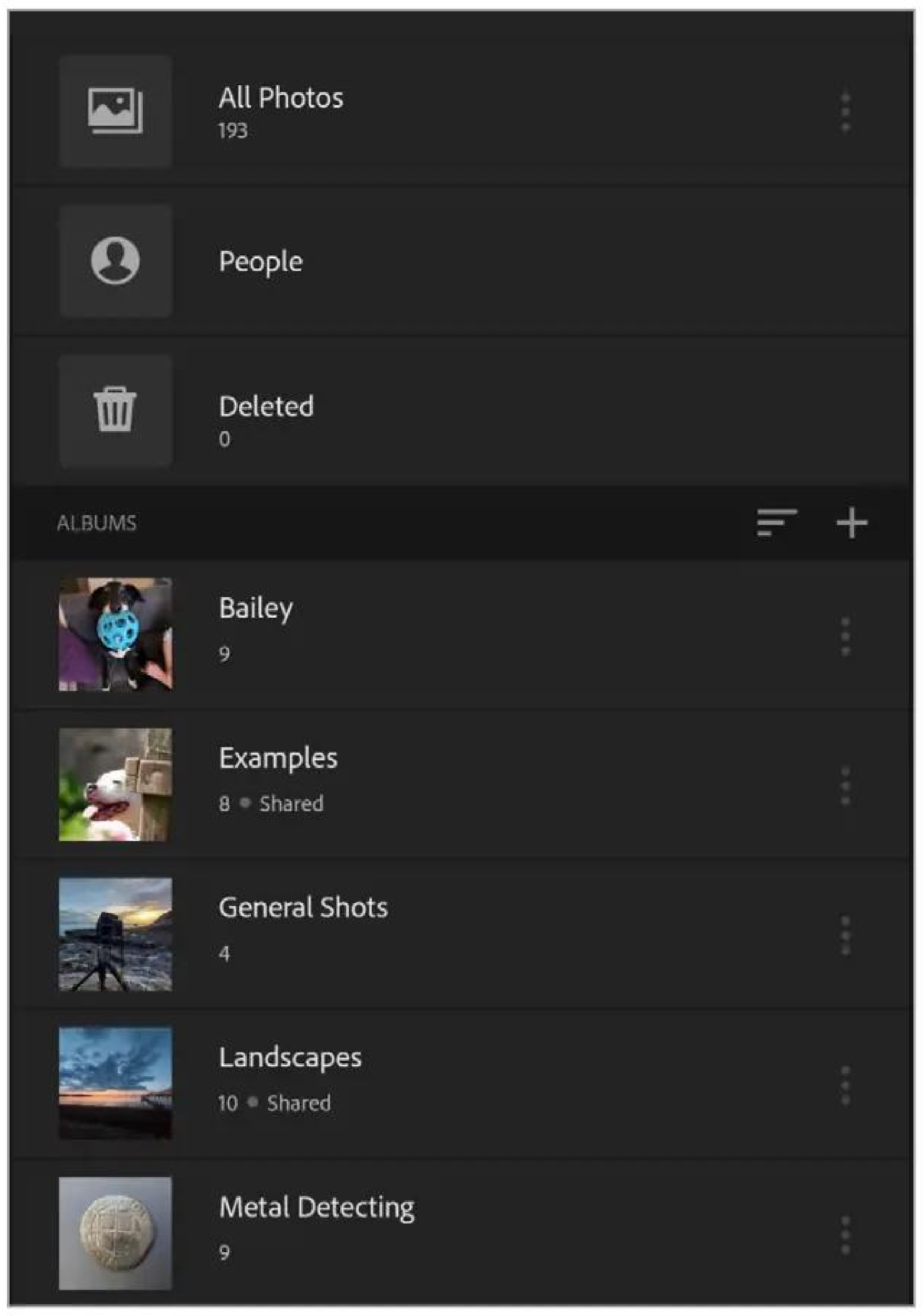
3 items (5.0 MB/100.0 MB) Resize image

20210319_164529.jpg 1006 KB

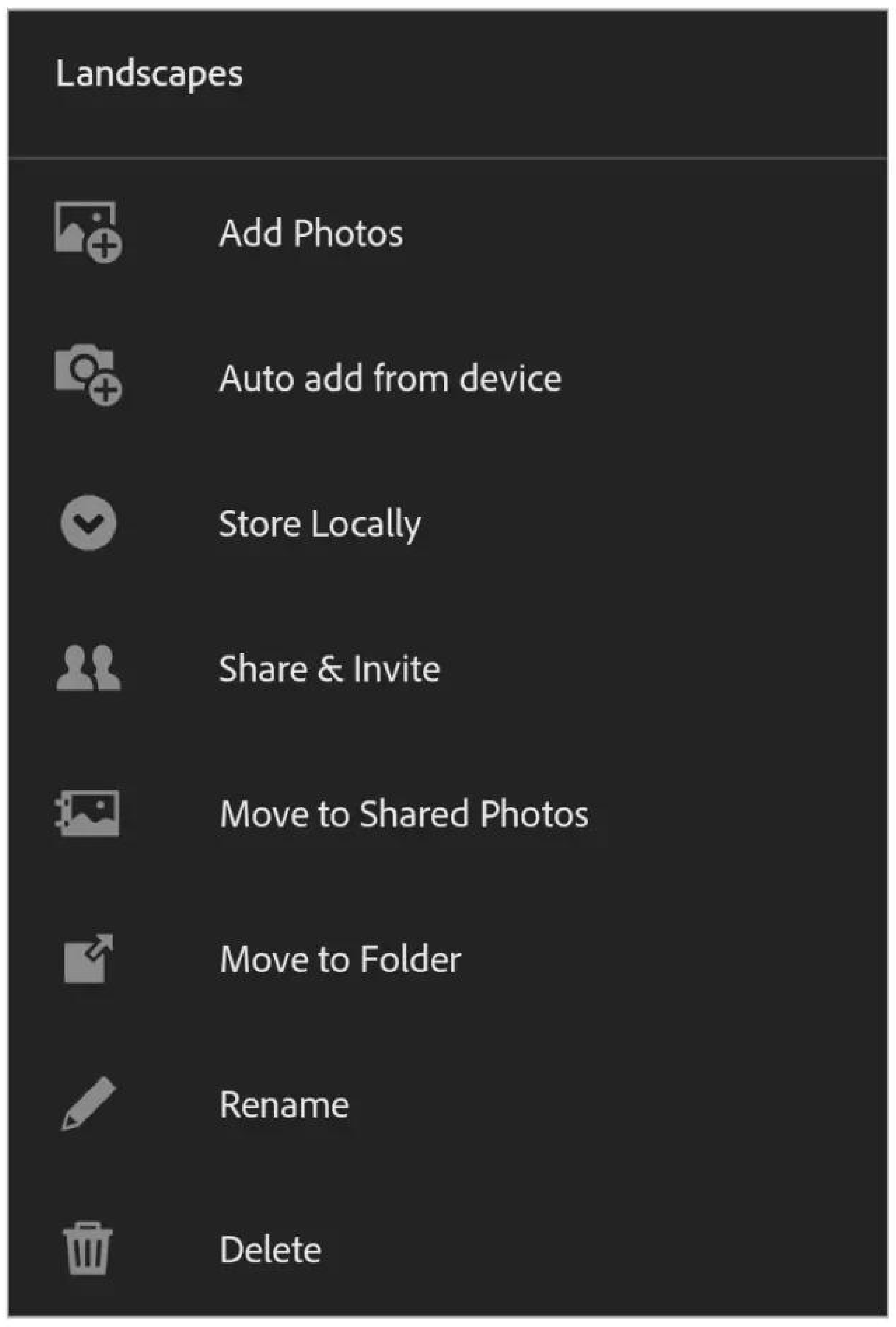
20210322_135654.jpg 1.9 MB

20210322_135645.jpg 2.2 MB

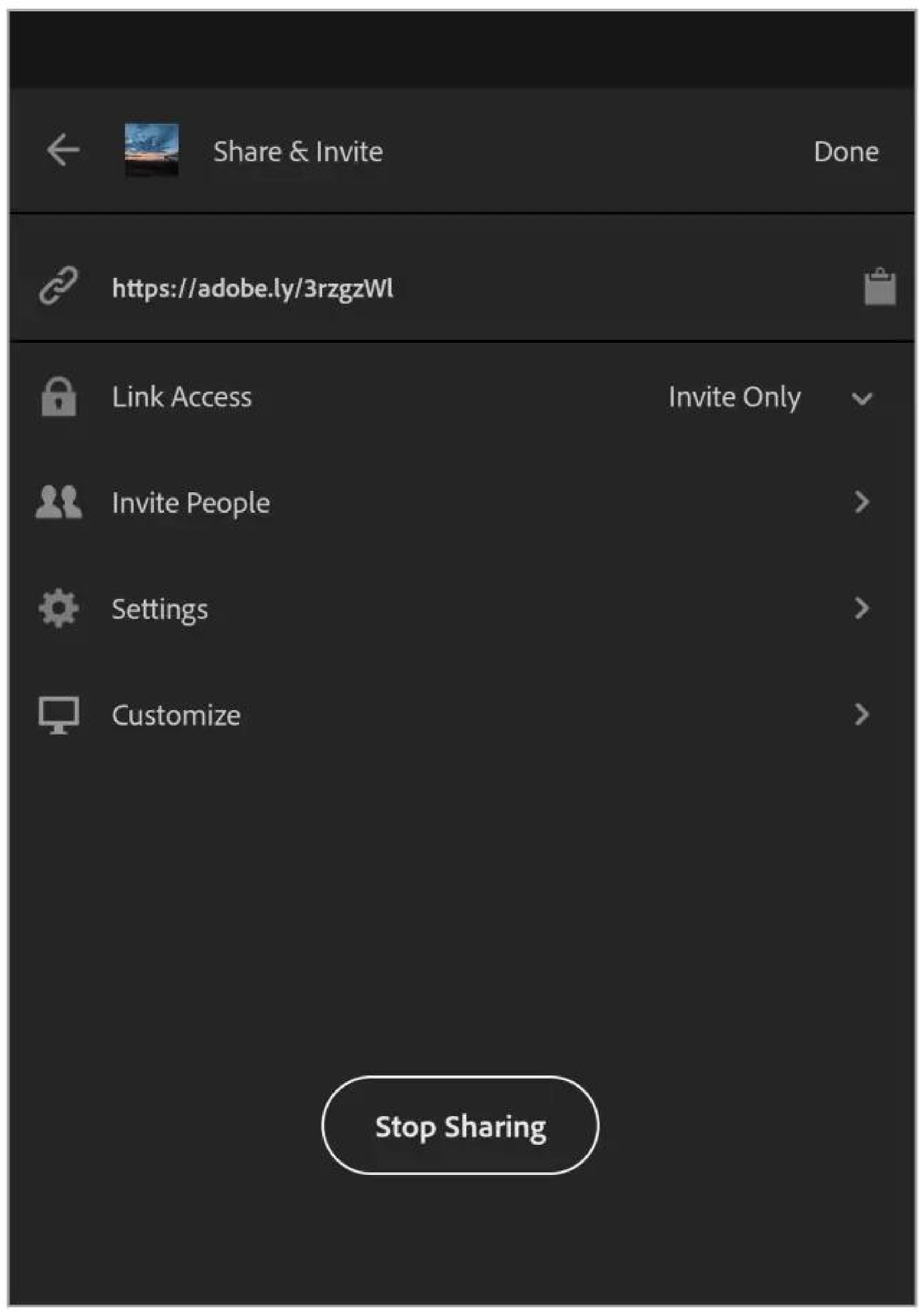
6 Be aware that the images you're sharing via email, as in this example, could add up to quite a few megabytes. Luckily, the image examples we've used in this tutorial only add up to about 5MB, which is more than okay to send via Gmail or similar. Watch out for those larger image files though.


All Photos
193
People
Deleted
0
ALBUMS
Bailey
9
Examples
8 • Shared
General Shots
4
Landscapes
10 • Shared
Metal Detecting
9

7 You can share entire Albums from the Lightroom app. Start at the Lightroom front screen, where the Albums are organised and tap the three vertical dots to the right of the Album you want to share. We have an album of images that we would like to share on the web for friends and family to see.


Landscapes
Add Photos
Auto add from device
Store Locally
Share & Invite
Move to Shared Photos
Move to Folder
Rename
Delete

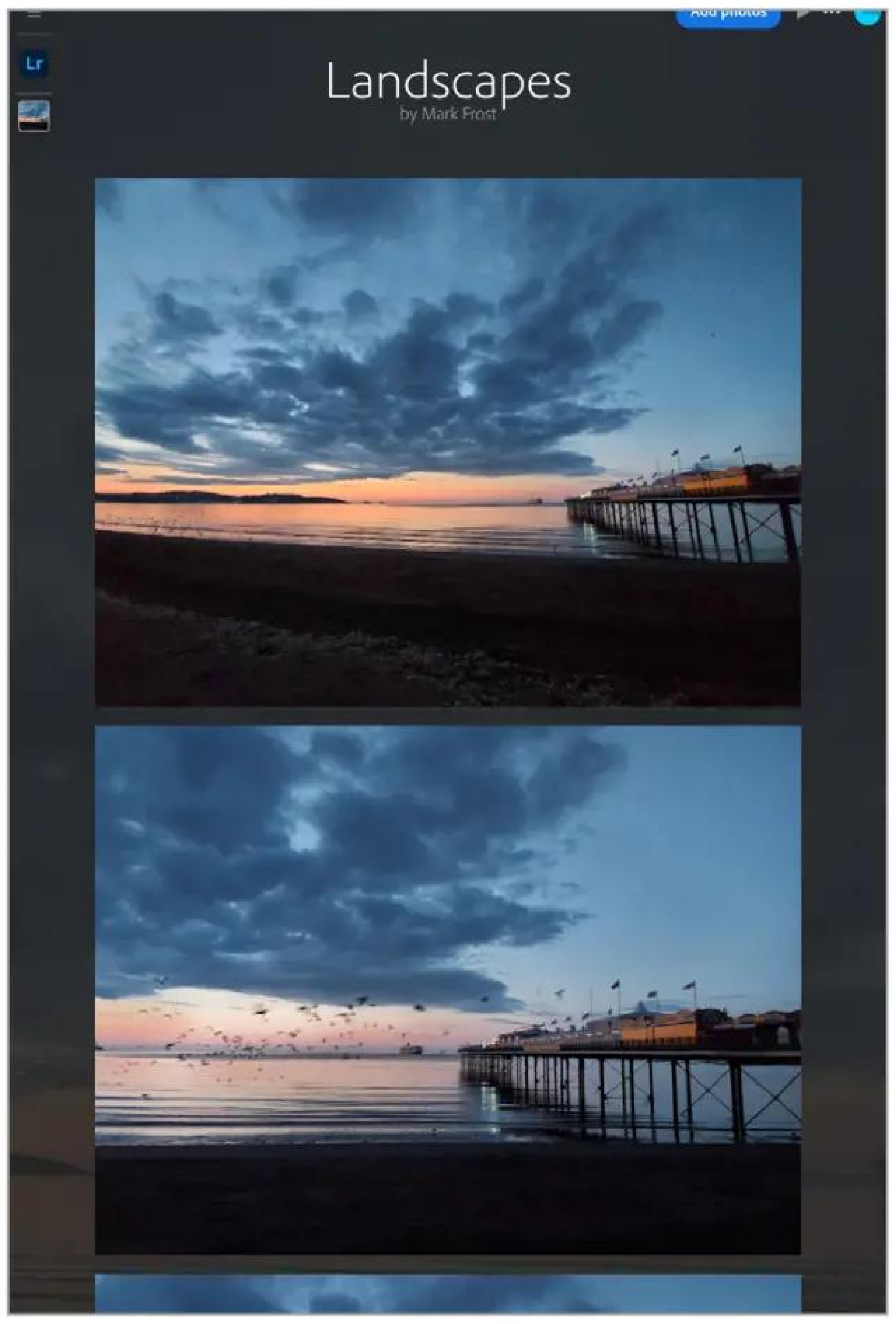
8 The options window will open next and present you with a number of choices. You can add more photos if you wish or store them locally on your current device. You can also rename or delete images and turn the images into a slideshow. We want to click on the Share & Invite option.


Share & Invite
Done
Invite People
Settings
Customize
Stop Sharing

https://adobe.ly/3rzgzWl

Link Access: Invite Only

9 The Share & Invite panel will open and present you with a few more options. You can control who sees the album online by making it viewable by invitation only. You can generate a click-able link that will allow you, and anyone who is invited to be able to go and see the album online.


Landscapes
by Mark Frost

10 This opens the Adobe Lightroom Share site, displaying the photos in the shared Album. If you're happy with what's available, tap back out of the browser window. In the Share Photos menu, you can now tap the Share Link and use it like the previous share functions, sending the generated link to your contacts.

Improve Your Image: The Develop Module

You've familiarised yourself with the organisational abilities of the Library module, so now it's time to get down to what Adobe Lightroom is really all about: using the powerful tools in the Develop module to enhance and improve your photos. From basic corrections like white balance and lens distortion, to sophisticated tone and filter effects, we'll show you how to get the best results from this amazing program.

Contents

Introducing the develop module
Using the crop and straighten tool
Removing spots and red eye
Adjustments using the basic panel
Adjusting the white balance
Optimising photos with the histogram
Basic colour adjustments
Improve contrast with tone controls
Reducing high ISO noise
Improve your monochromes
Linear and radial gradients
Editing with the adjustment brush
Editing linear and radial gradients
Colour and tone camera presets
Correcting lens distortions

Introducing the Develop Module

The Develop module is where the tools that let you fully realise the potential of your photographs lie. Enhancing and improving them, removing blemishes, noise and distortion and applying a range of impressive effects and filters.

Like the Library module, the Develop module window is divided into three main areas, the left sidebar, the main viewing area and the right sidebar. The filmstrip view is also available at the bottom of the screen. The filmstrip and both sidebars can be permanently in view or set to auto-hide by clicking on the arrow symbols on the edge of the screen.

The left sidebar holds the Navigator thumbnail, a list of available Presets, the Snapshot and History views and the Collections. The right-hand sidebar holds all the actual editing and enhancement tools, as well as the Histogram.

1 Navigator

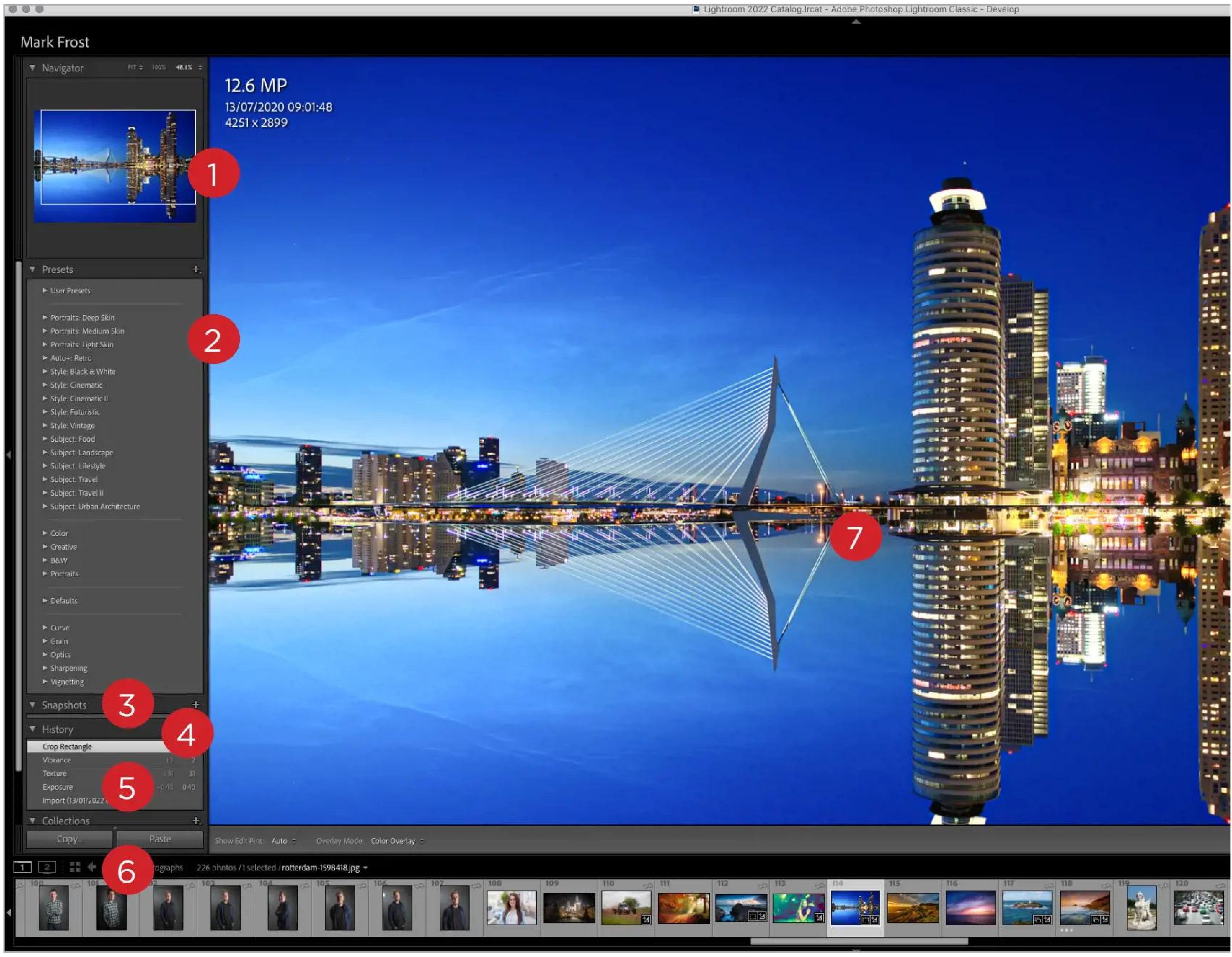
This shows you a view of the whole image, useful if you zoom in when using the spot correction tool and need to navigate around the frame.

2 Presets

This list shows the preset adjustments that can be applied with just one click. Lightroom comes with dozens built-in and you can add and edit your own user presets.

3 Snapshots

If you're experimenting and making adjustments to an image as you go, you can save a snapshot of your progress at any point. It's like a save point in a video game; you can go back to that point by clicking on the snapshot in the list.


Lightroom 2022 Catalog.lrcat - Adobe Photoshop Lightroom Classic - Develop
Mark Frost
Navigator
FIT
100%
48.1%
12.6 MP
13/07/2020 09:01:48
4251 x 2899
1
Presets
User Presets
Portraits: Deep Skin
Portraits: Medium Skin
Portraits: Light Skin
Auto+: Retro
Style: Black & White
Style: Cinematic
Style: Cinematic II
Style: Futuristic
Style: Vintage
Subject: Food
Subject: Landscape
Subject: Lifestyle
Subject: Travel
Subject: Travel II
Subject: Urban Architecture
Color
Creative
B&W
Portraits
Defaults
Curve
Grain
Optics
Sharpening
Vignetting
2
Snapshots
3
History
4
Crop Rectangle
Vibrance
Texture
Exposure
Import (13/01/2022
5
Collections
Copy...
Paste
Show Edit Pins: Auto
Overlay Mode: Color Overlay
6
226 photos / 1 selected / rotterdam-1598418.jpg
7

4 History

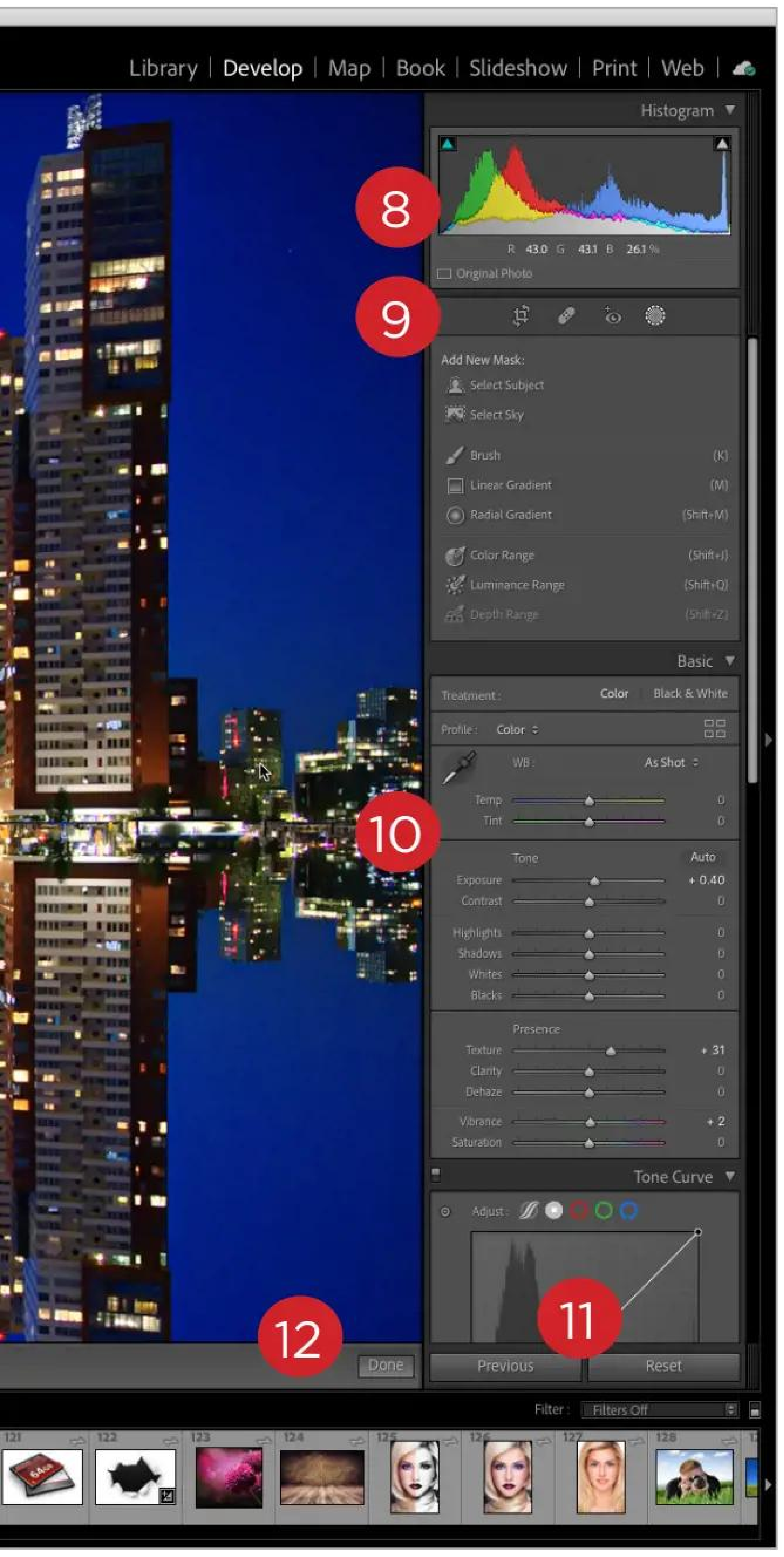
This shows each alteration that you've made to your image in chronological order. If you decide that you don't like the last few changes that you made, you can revert to an earlier point by clicking the step in the history list.

5 Collections

We covered these in the Library module section. You can also access your collections from the Develop module by opening up this tab.

6 Copy and Paste

Rather than copying the active image, as you might expect, the Copy button copies certain adjustments that you've made to the image. You can open another image and instantly apply the same corrections by clicking the Paste button. You can choose which parameters are copied.


Library | Develop | Map | Book | Slideshow | Print | Web
Histogram
R 43.0 G 43.1 B 26.1 %
Original Photo
Add New Mask:
Select Subject
Select Sky
Brush (K)
Linear Gradient (M)
Radial Gradient (Shift+M)
Color Range (Shift+J)
Luminance Range (Shift+Q)
Depth Range (Shift+Z)
Basic
Treatment : Color Black & White
Profile : Color
WB : As Shot
Temp 0
Tint 0
Tone Auto
Exposure + 0.40
Contrast 0
Highlights 0
Shadows 0
Whites 0
Blacks 0
Presence
Texture + 31
Clarity 0
Dehaze 0
Vibrance + 2
Saturation 0
Tone Curve
Adjust :
Done
Previous
Reset
Filter : Filters Off
8
9
10
11
12

7 View Window

As with the Library module, there are a number of viewing options available, including split-screen and the before-and-after view.

8 Histogram

The histogram shows you a graph of the number of pixels of a given tone in three colour channels, vital for setting the best optimum exposure.

9 Tools

Here's where you'll find the Crop Overlay tool, Spot Removal and Red Eye Correction tools. Linear filters, Radial filters, the Adjustment Brush and new tools to automatically select subject and sky are all under the Masking tool. Masking is the latest additional to the editing arsenal after the 2022 update and amalgamates a few key tools under one heading.

10 Developing and Adjustment Tools

In each of these panels you'll find more tools to improve your images, such as lens distortion correction, noise reduction, grain and filter effects and more.

11 Previous and Reset Buttons

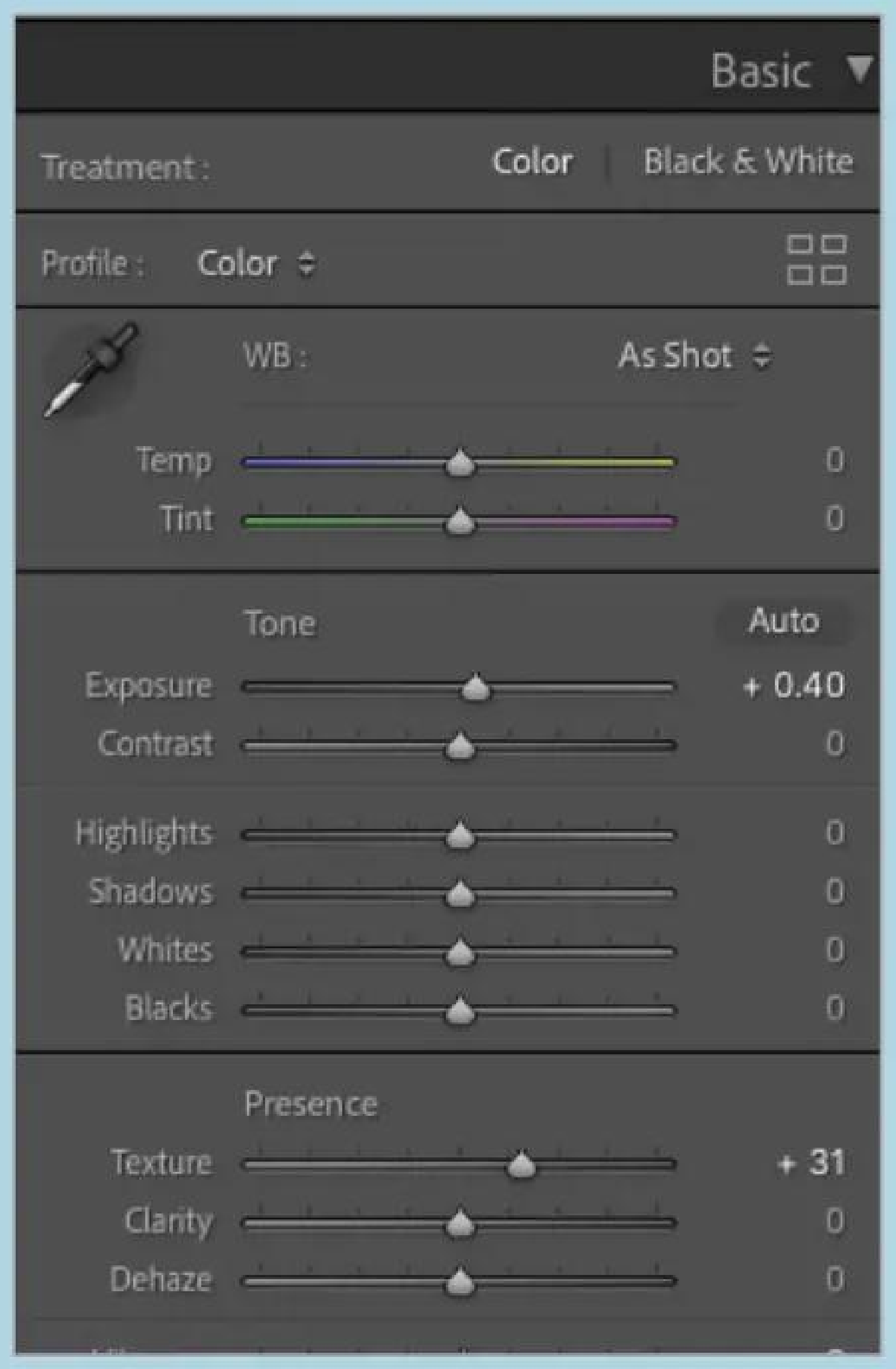
As the names imply, the Previous button takes you back one editing step, while the Reset button removes all effects and restores the image to its original state. Since Lightroom edits non-destructively this involves no loss of original image quality.

12 Done Button

The Done button applies any adjustments you've made in Lightroom. Clicking it will close the current adjustment window and make the alterations to the image. If you clicked it too soon, you need to start again and re-apply any adjustments.

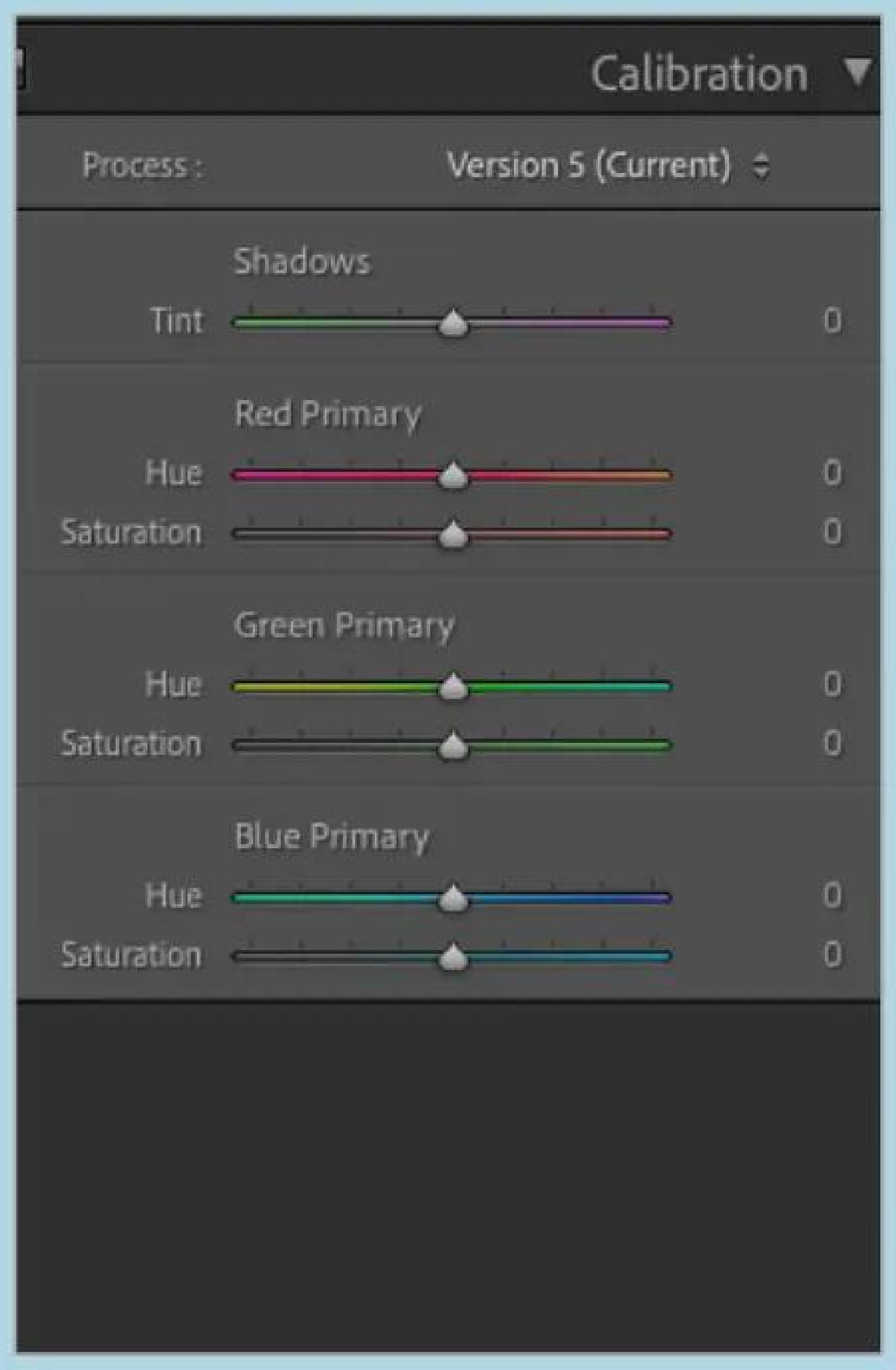
The Adjustment Panel

The Adjustment Panel offers a range of tools tailored to the Module you're currently on, in this case the Develop Module. Here you can find a wealth of features to help tweak your photo to perfection.


Basic
Treatment : Color Black & White
Profile : Color
WB : As Shot
Temp 0
Tint 0
Tone Auto
Exposure + 0.40
Contrast 0
Highlights 0
Shadows 0
Whites 0
Blacks 0
Presence
Texture + 31
Clarity 0
Dehaze 0

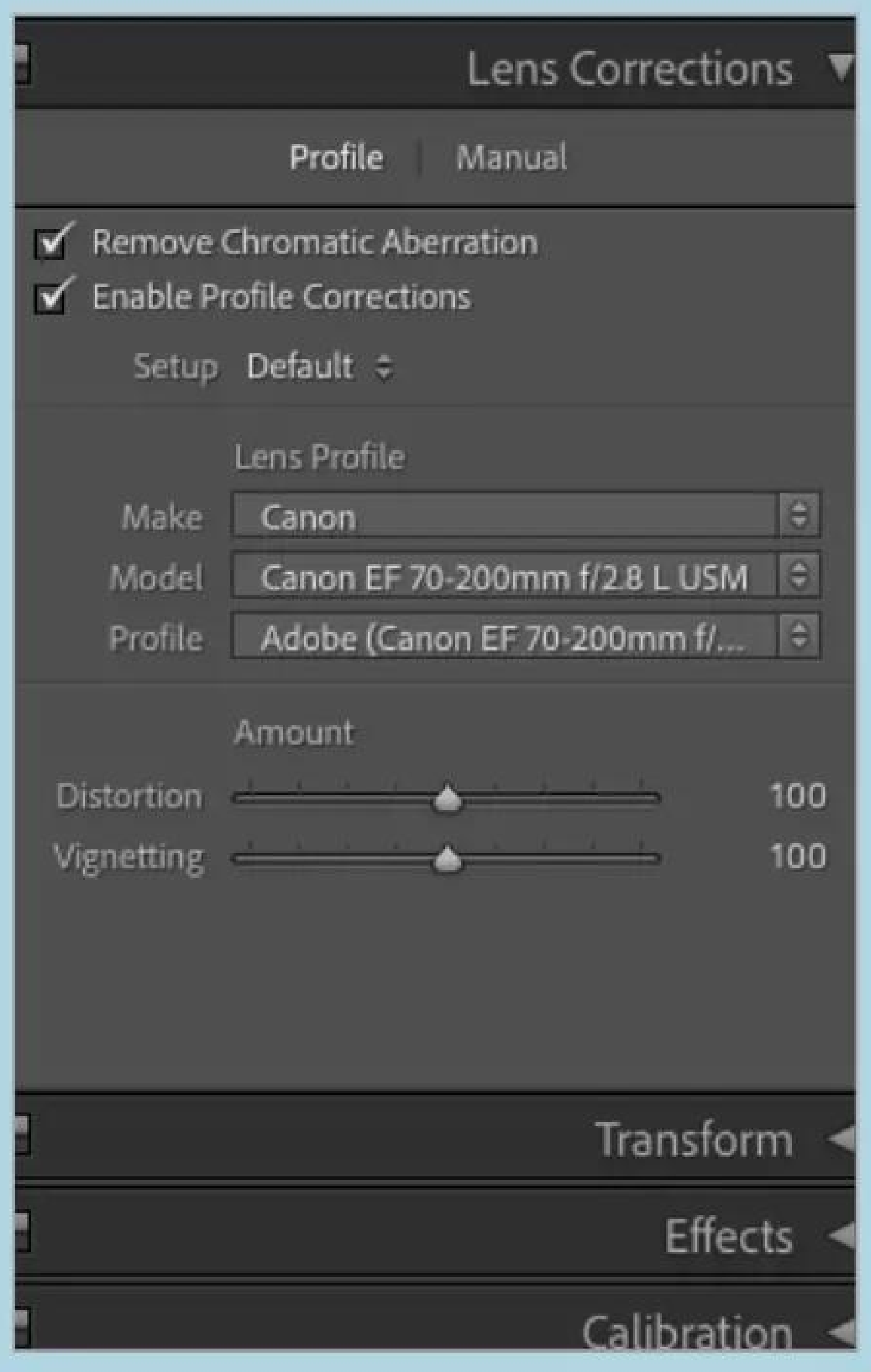
Basic

The Basic panel holds the essential adjustments for white balance, exposure, contrast and tone, as well as clarity, vibrancy and saturation. This is probably where you'll spend most of your time when using the Develop module.


Calibration
Process : Version 5 (Current)
Shadows
Tint 0
Red Primary
Hue 0
Saturation 0
Green Primary
Hue 0
Saturation 0
Blue Primary
Hue 0
Saturation 0

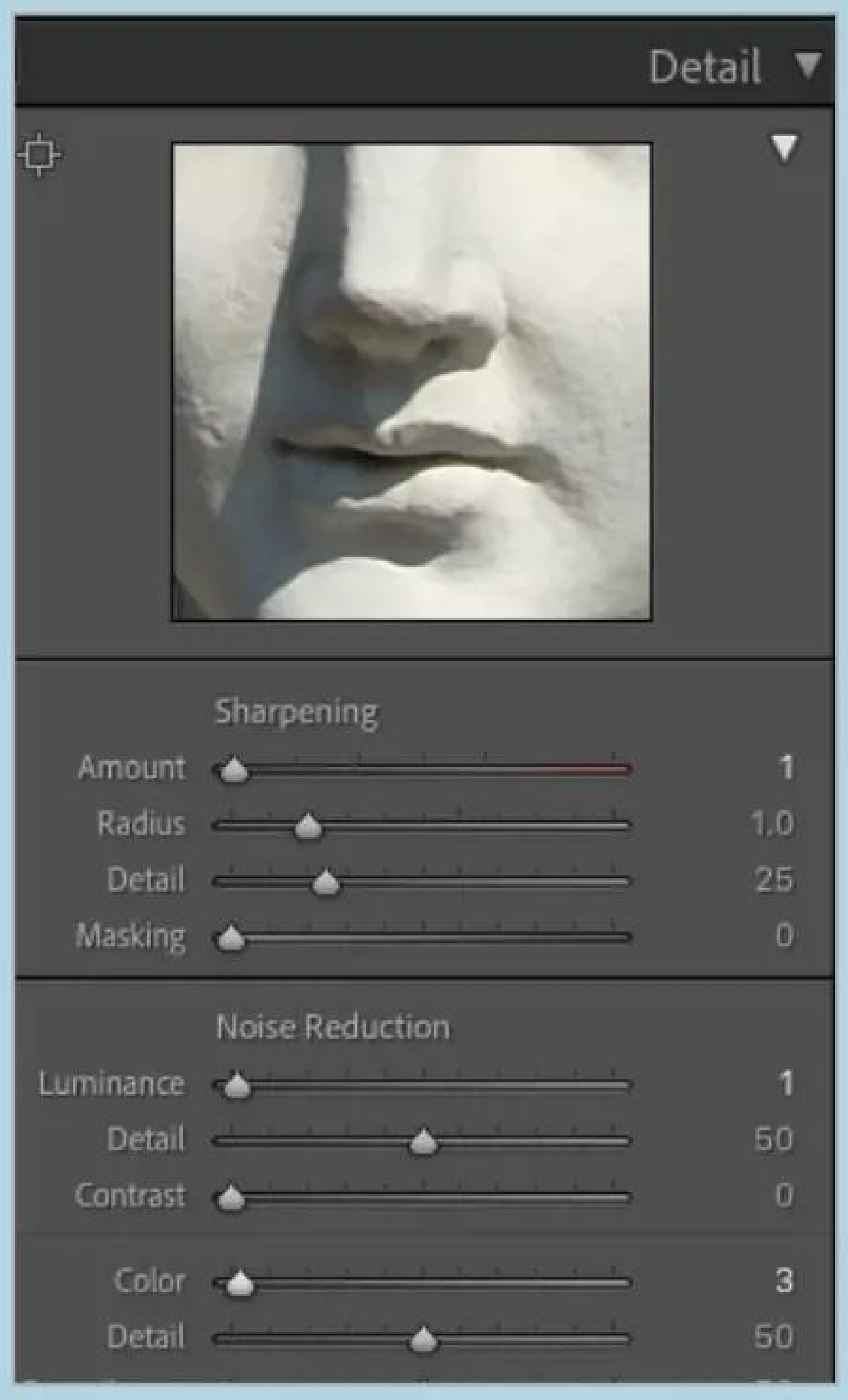
Calibration

Some cameras have unique colour balance profiles that are embedded in the metadata along with the image file. You can use these profiles to ensure absolutely accurate colour reproduction in your photo if you require it.


Lens Corrections
Profile Manual
☑ Remove Chromatic Aberration
☑ Enable Profile Corrections
Setup Default
Lens Profile
Make Canon
Model Canon EF 70-200mm f/2.8 L USM
Profile Adobe (Canon EF 70-200mm f/...
Amount
Distortion 100
Vignetting 100
Transform
Effects
Calibration

Lens Corrections

Lightroom can automatically apply preset corrections that compensate for known distortions in many popular lenses from most manufacturers. You can also choose to make manual adjustments yourself.

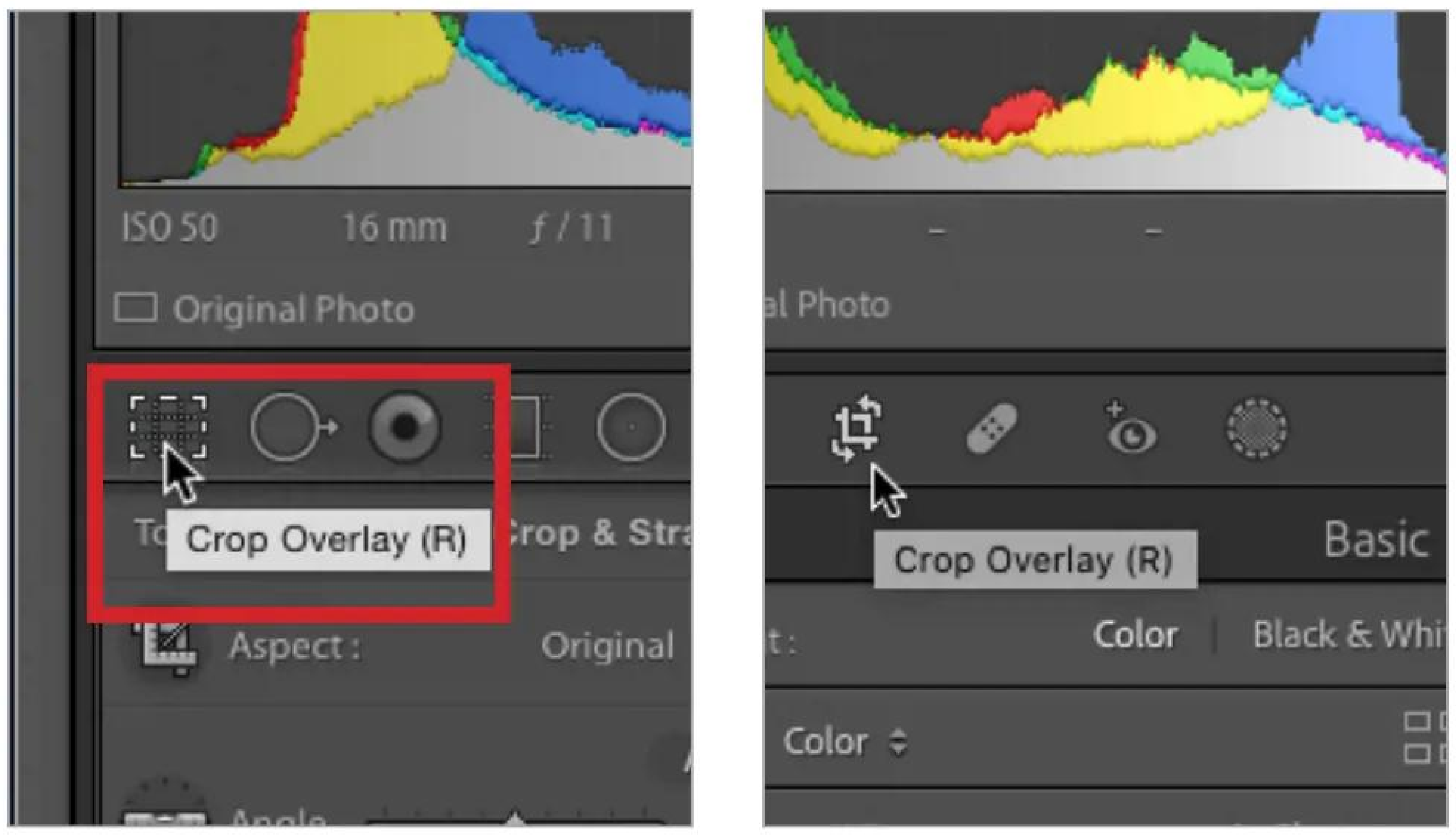

Detail
Sharpening
Amount 1
Radius 1.0
Detail 25
Masking 0
Noise Reduction
Luminance 1
Detail 50
Contrast 0
Color 3
Detail 50

Detail

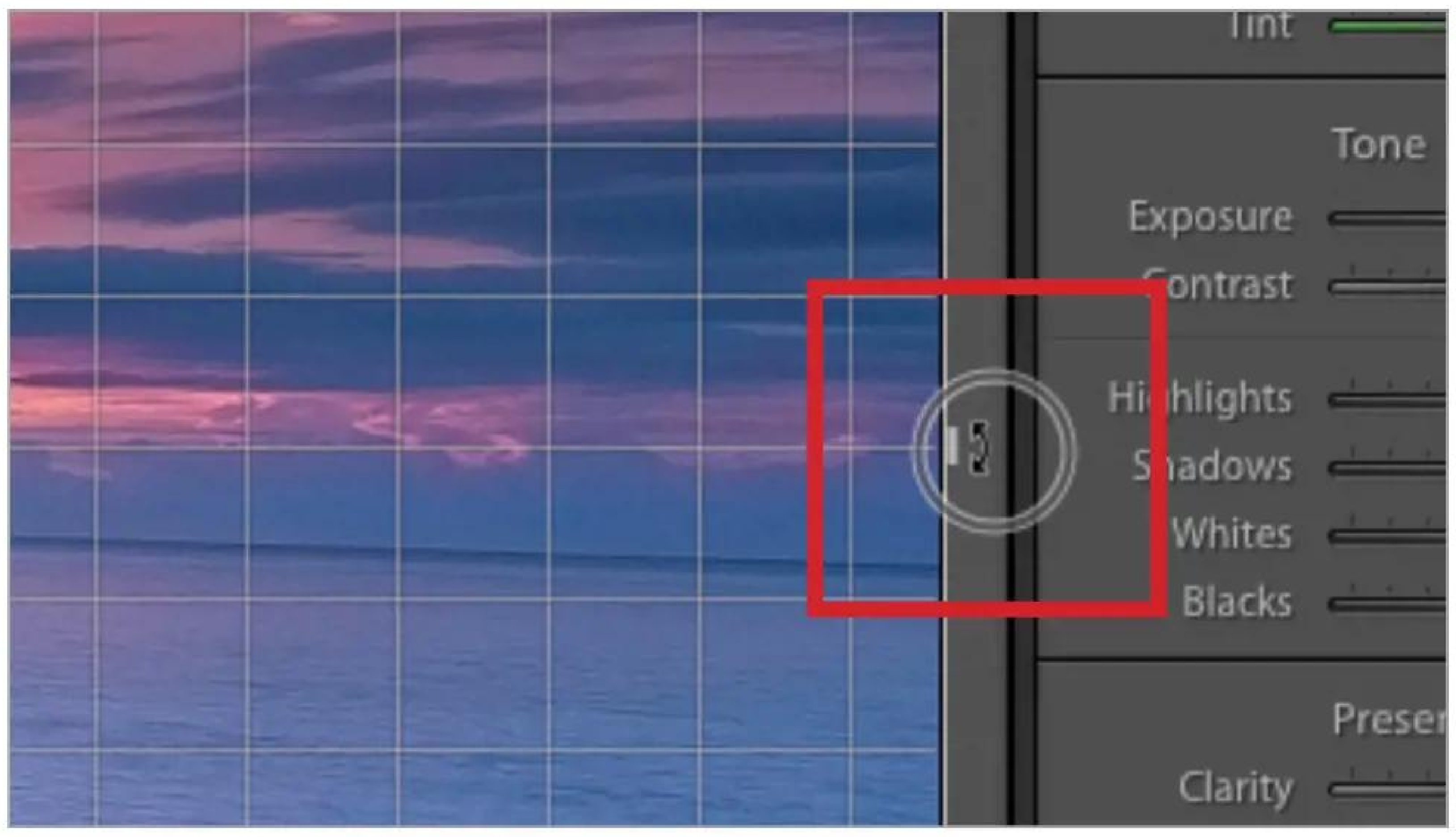
The Detail panel is where you can find the controls for adjusting sharpening and noise reduction. It includes a small preview window for judging the effects of your image adjustments.

Using the Crop & Straighten Tool

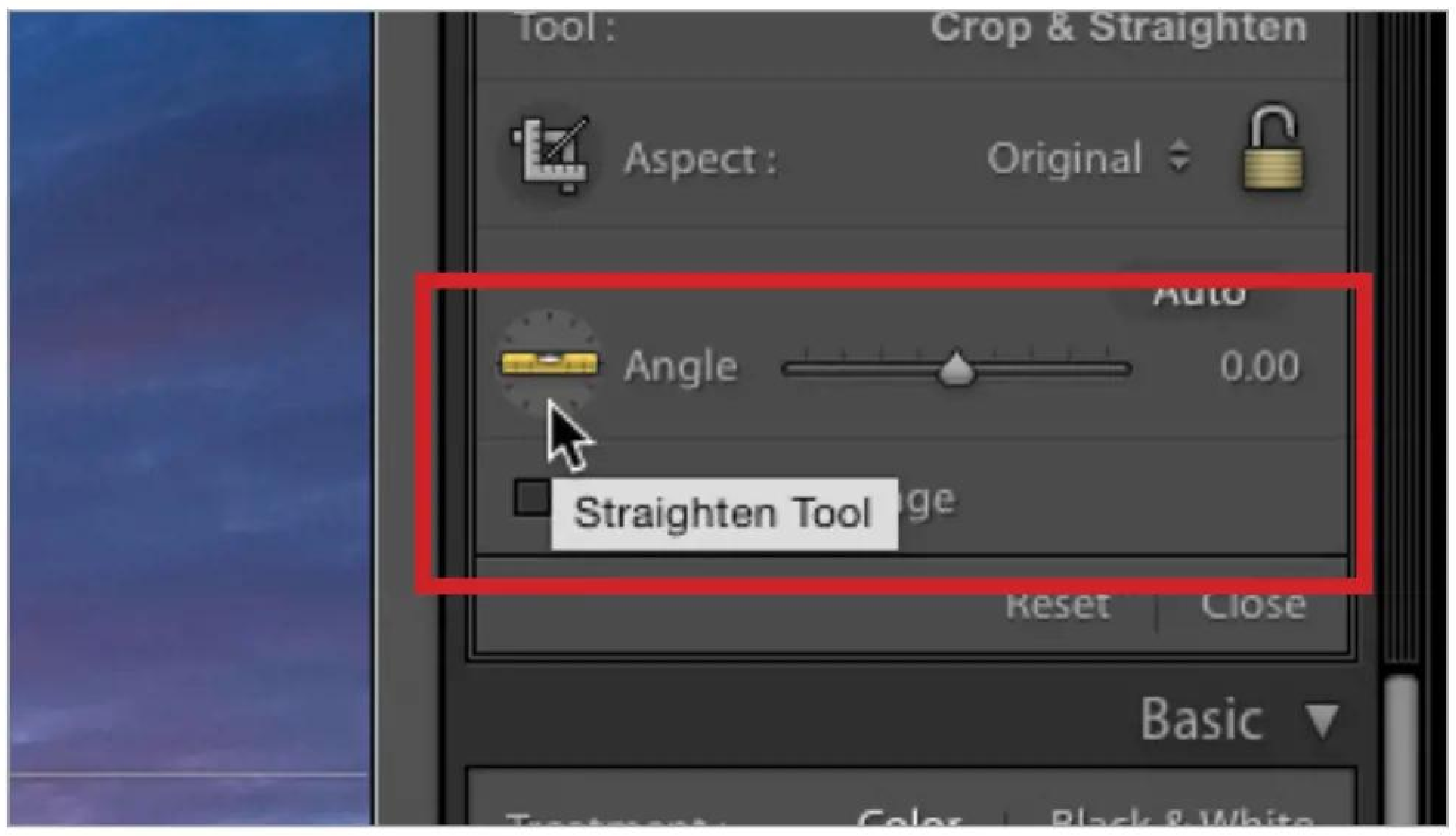
Even the most careful photographer will sometimes rush a shot and take a photo that's not quite level, with either a sloping horizon or a leaning building. Fortunately, Lightroom offers several effortless ways to correct those faults.


ISO 50
16 mm
ƒ / 11
Original Photo
Crop Overlay (R)
Aspect :
Original
Angle
al Photo
Crop Overlay (R)
Basic
Color
Black & Whi
Color

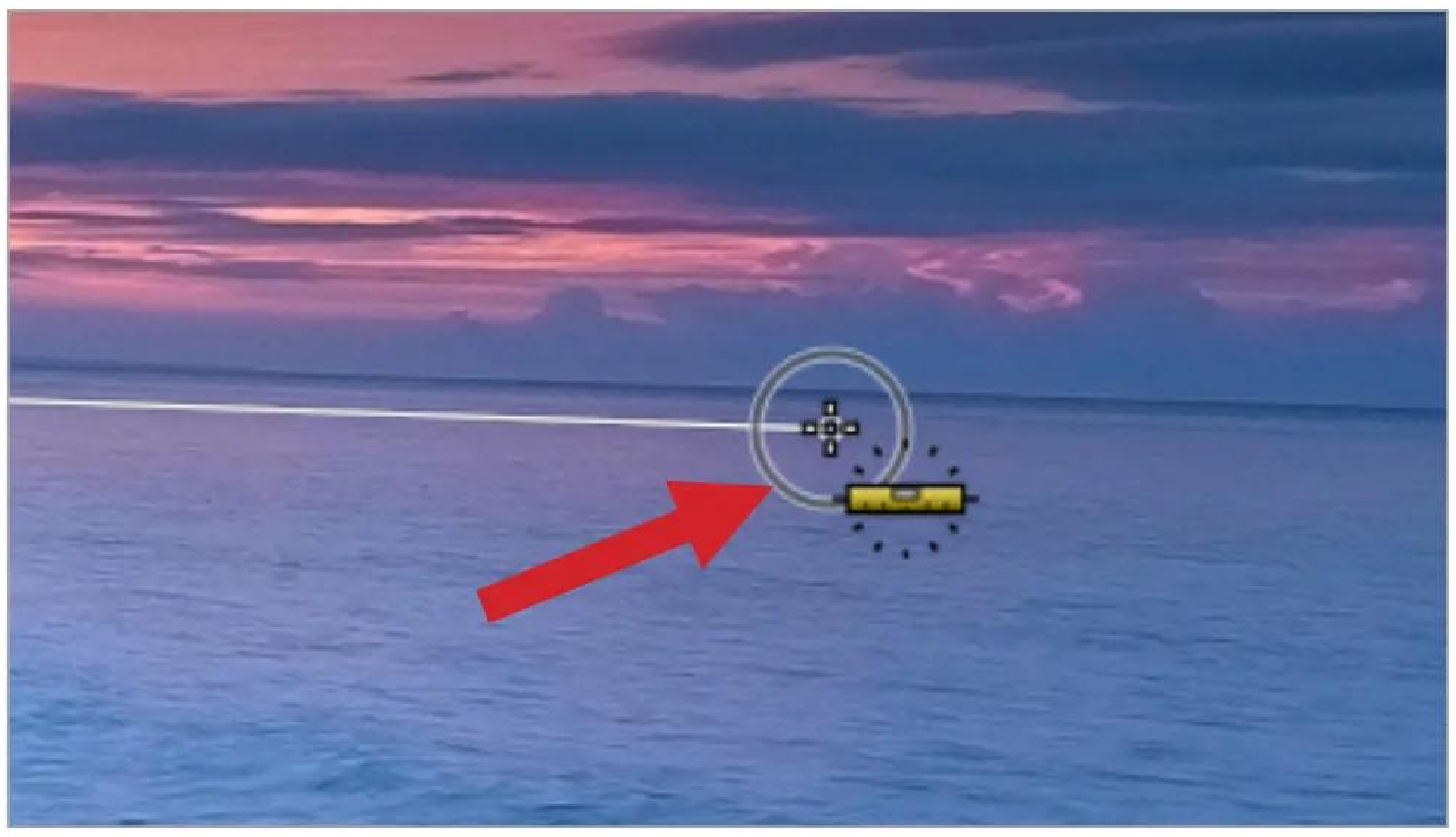
1 The main tools that you'll need to straighten your shots are found in the Crop & Straighten tool, located on the editing tools panel that we looked at before. Click on the tool and you can see a grid with corner handles appear over your image, as well as a panel of other tools and options appear below the panel. Note the icon change in the 2022 update.


Tint
Tone
Exposure
Contrast
Highlights
Shadows
Whites
Blacks
Preser
Clarity

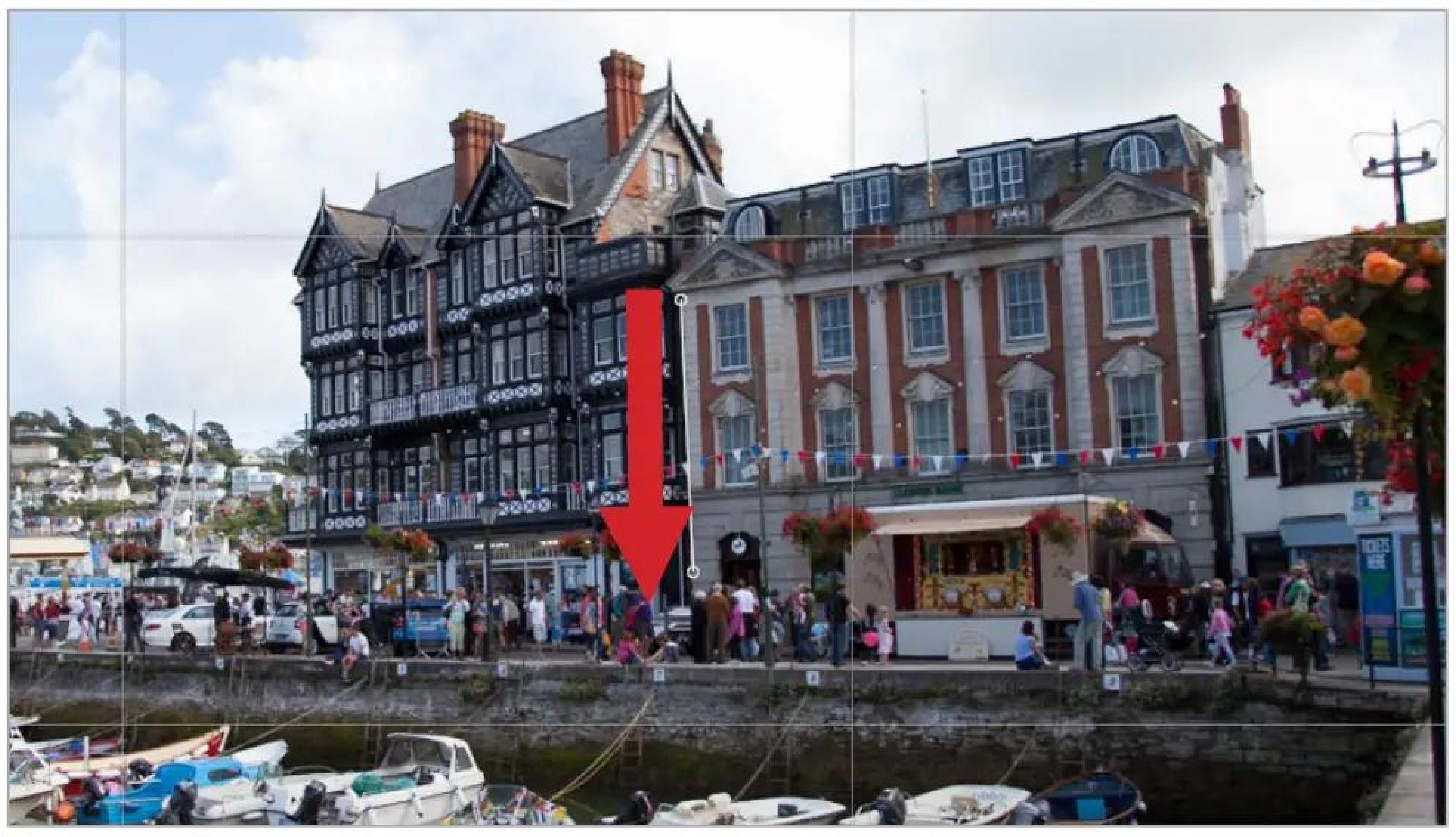
2 If you place your mouse cursor anywhere on the grey border of the workspace outside the image, you can see that it changes to a double-ended curved arrow, indicating rotation. Click anywhere in this area and you'll see a grid appear over your image. You can simply drag the image around until your horizon lines up with the grid.


Tool :
Crop & Straighten
Aspect :
Original
Auto
Angle
0.00
Straighten Tool
Reset
Close
Basic

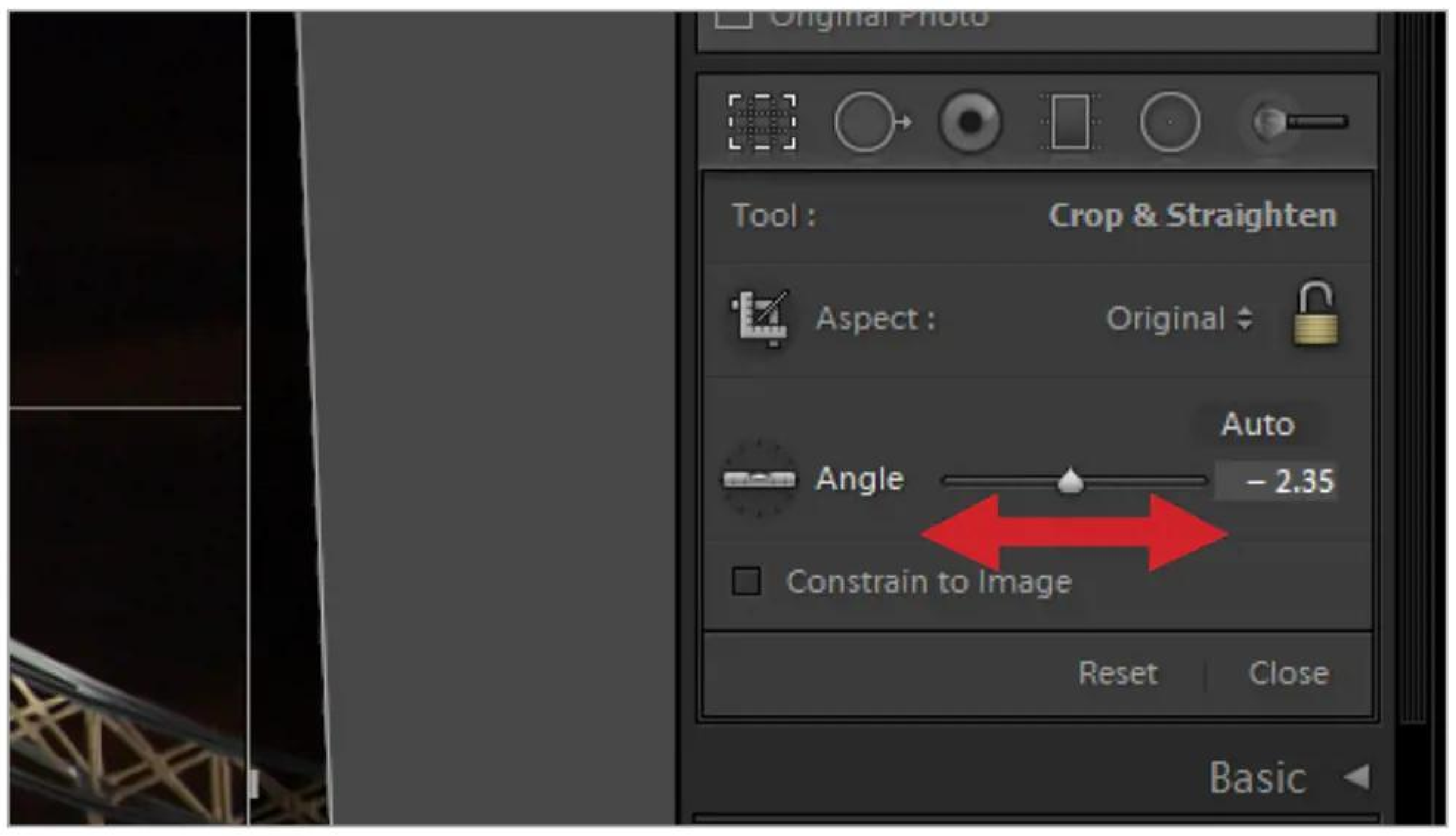
3 A quicker and more precise way to straighten a tilted horizon or leaning vertical is to use the Straighten Tool. You'll find this on the left-hand side of the options panel below the edit tool bar when you click on the Crop & Straighten tool. It's the circular icon with a picture of a spirit level in it. Click on this icon to activate the tool.



4 To use the Straighten Tool on a tilted horizon, simply click on one end of the horizon line and drag a line along it. As soon as you release the Mouse button Lightroom will automatically rotate the image to make the line horizontal. Note that it also constrains the rotated image within the original size of the frame.



5 The Straighten Tool also works on leaning verticals. To save a toppling building, activate the tool by clicking on the icon and then click and drag a line up or down a line on the image that should be vertical, such as the side of a structure. Again, as soon as you release the Mouse button the image will automatically be straightened.



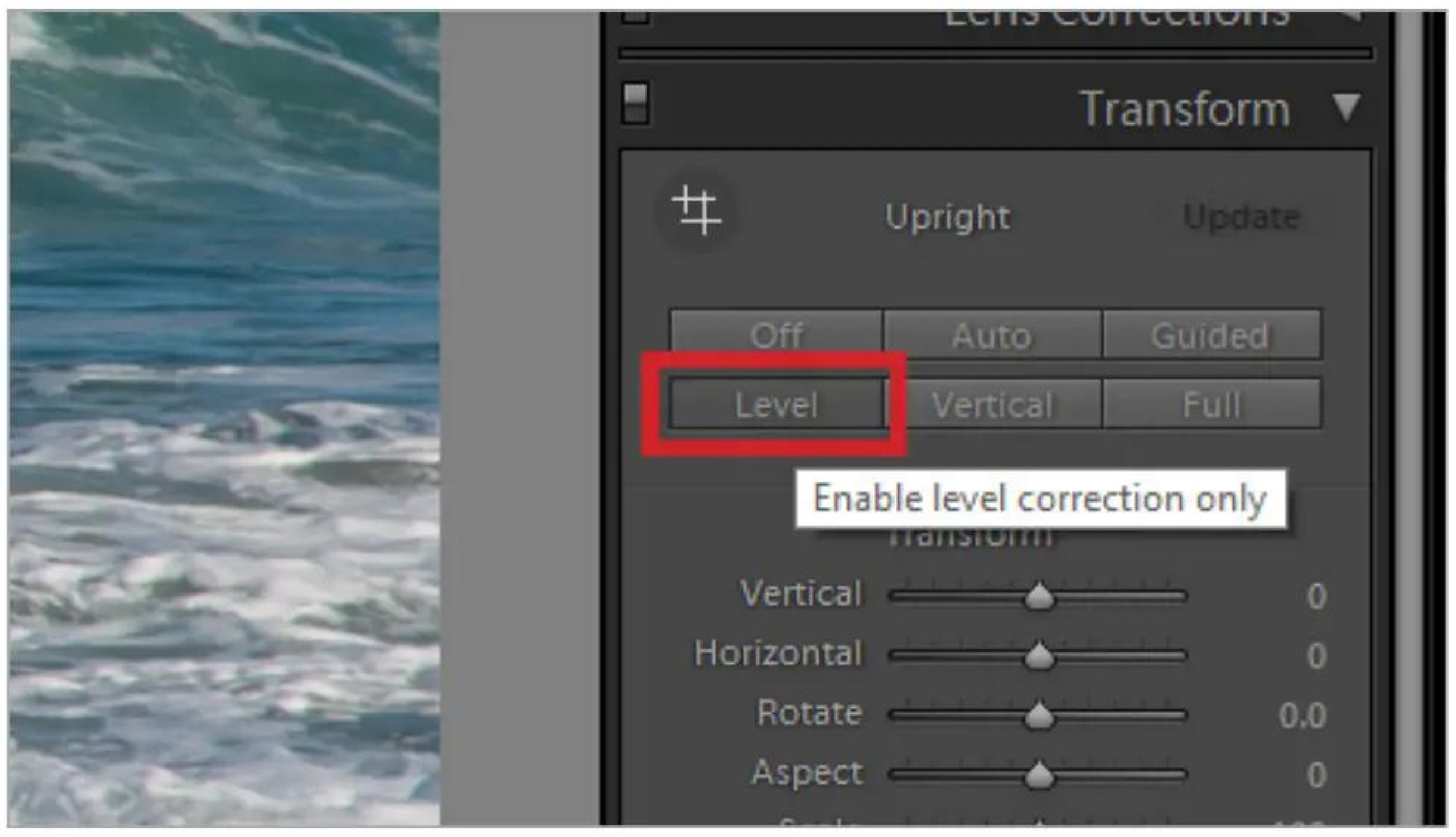
Tool : Crop & Straighten

Aspect : Original

Angle − 2.35

Auto
☐ Constrain to Image
Reset
Close
Basic

6 The Crop & Straighten tool offers a third option for rotating your image. Next to the Straighten Tool you'll see a slider. If you drag this slider right and left, you'll see that it rotates the image clockwise and anticlockwise. This is useful if you want to tilt an otherwise level shot. You can also enter the degree of tilt numerically.



Vertical 0

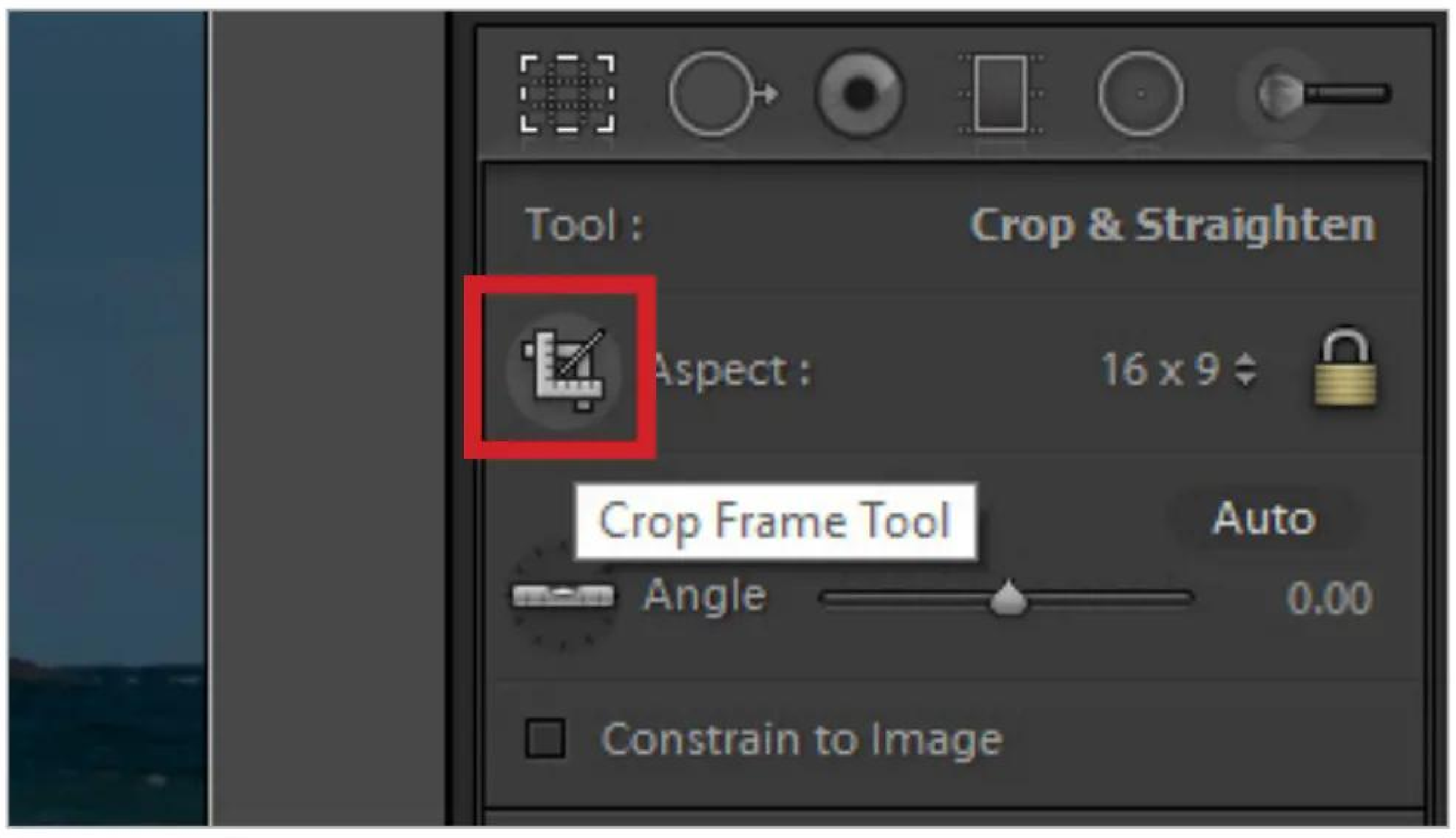
Horizontal 0

Rotate 0.0

Aspect 0

Transform
Upright
Update
Off
Auto
Guided
Level
Vertical
Full
Enable level correction only

7 There is yet another option for levelling your shots. If you open the Transform tools you'll see a panel of buttons in the options panel, including one marked Level. If you click on this button, Lightroom will attempt to automatically straighten your image. Note that this is based on pattern recognition and is therefore not 100 per cent reliable.



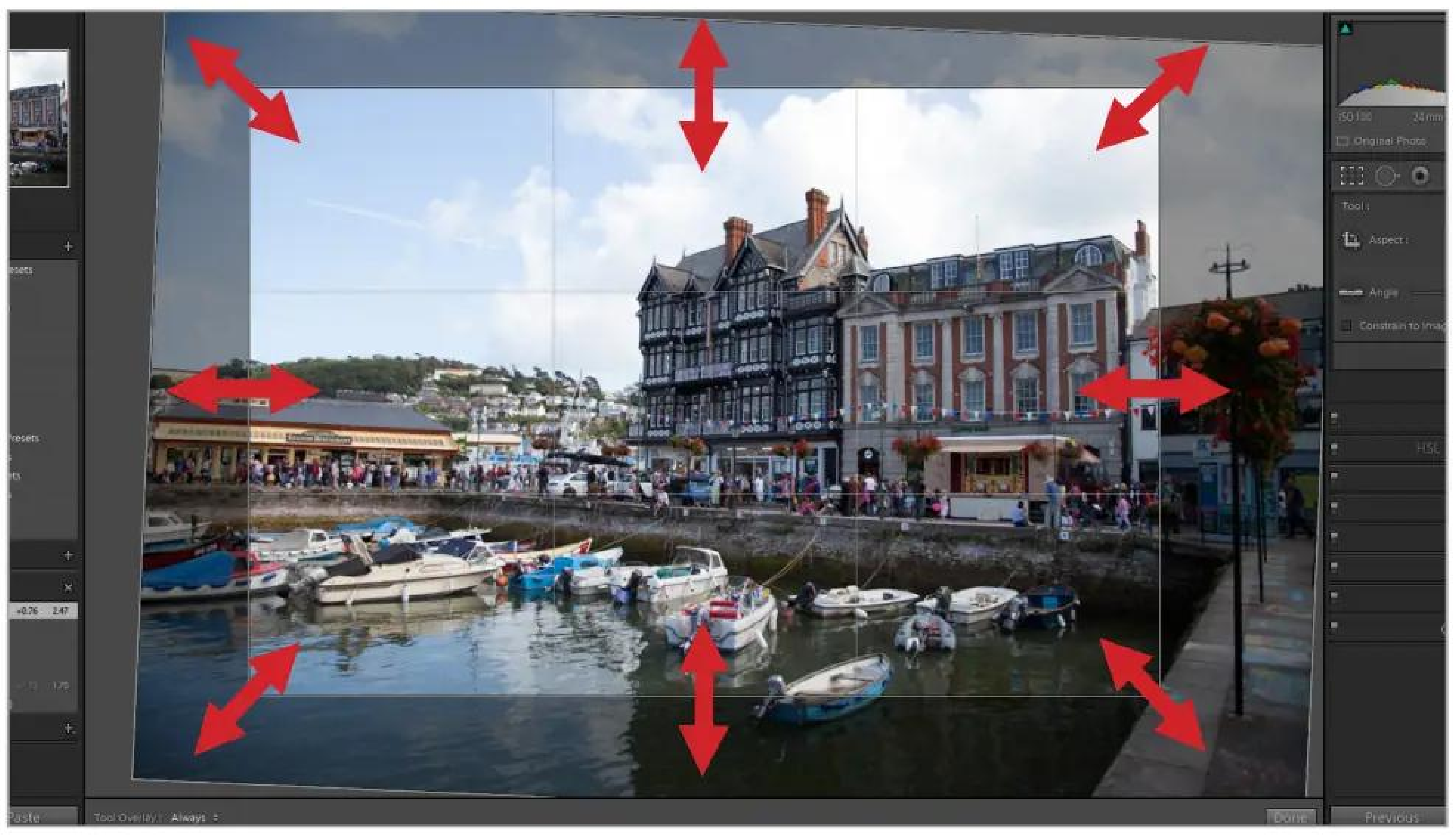
Tool : Crop & Straighten

Aspect : 16 x 9

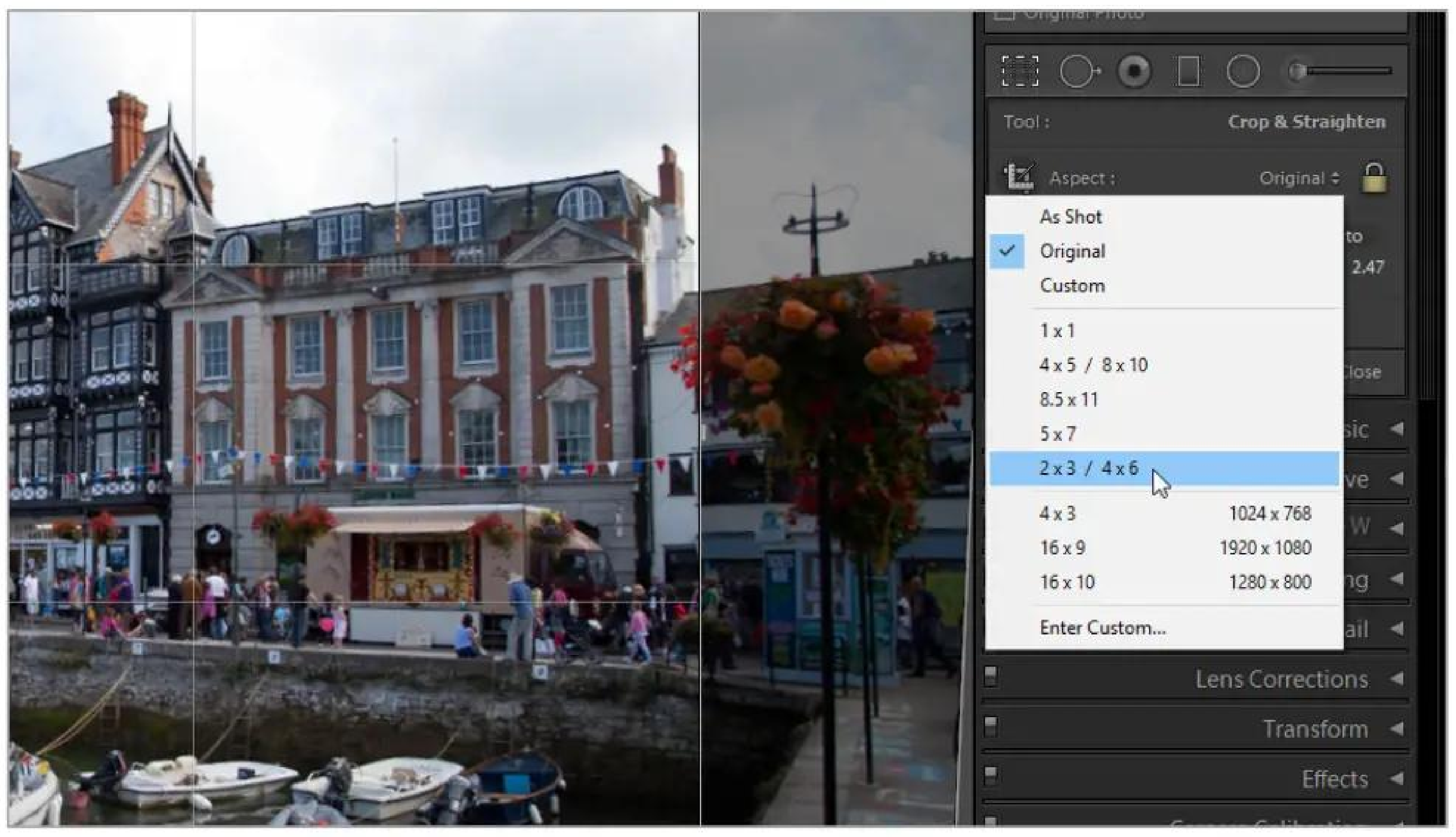
Angle 0.00

Crop Frame Tool
Auto
☐ Constrain to Image

8 Cropping your image to improve composition is very simple. When you open the Crop & Straighten tool it defaults to the crop tool straight away; but if you've previously been using the Straighten tool you'll need to click on the round icon with a picture of a darkroom crop-frame tool to switch the tool back into cropping mode.



9 You'll see a crop frame grid overlay your image, with drag points in each corner and in the middle of each side. When you click on and drag one of these points in any direction you'll see the cropping frame move, with the areas outside it slightly greyed out. It also includes a "rule of thirds" grid to help with classical composition.



Tool : Crop & Straighten

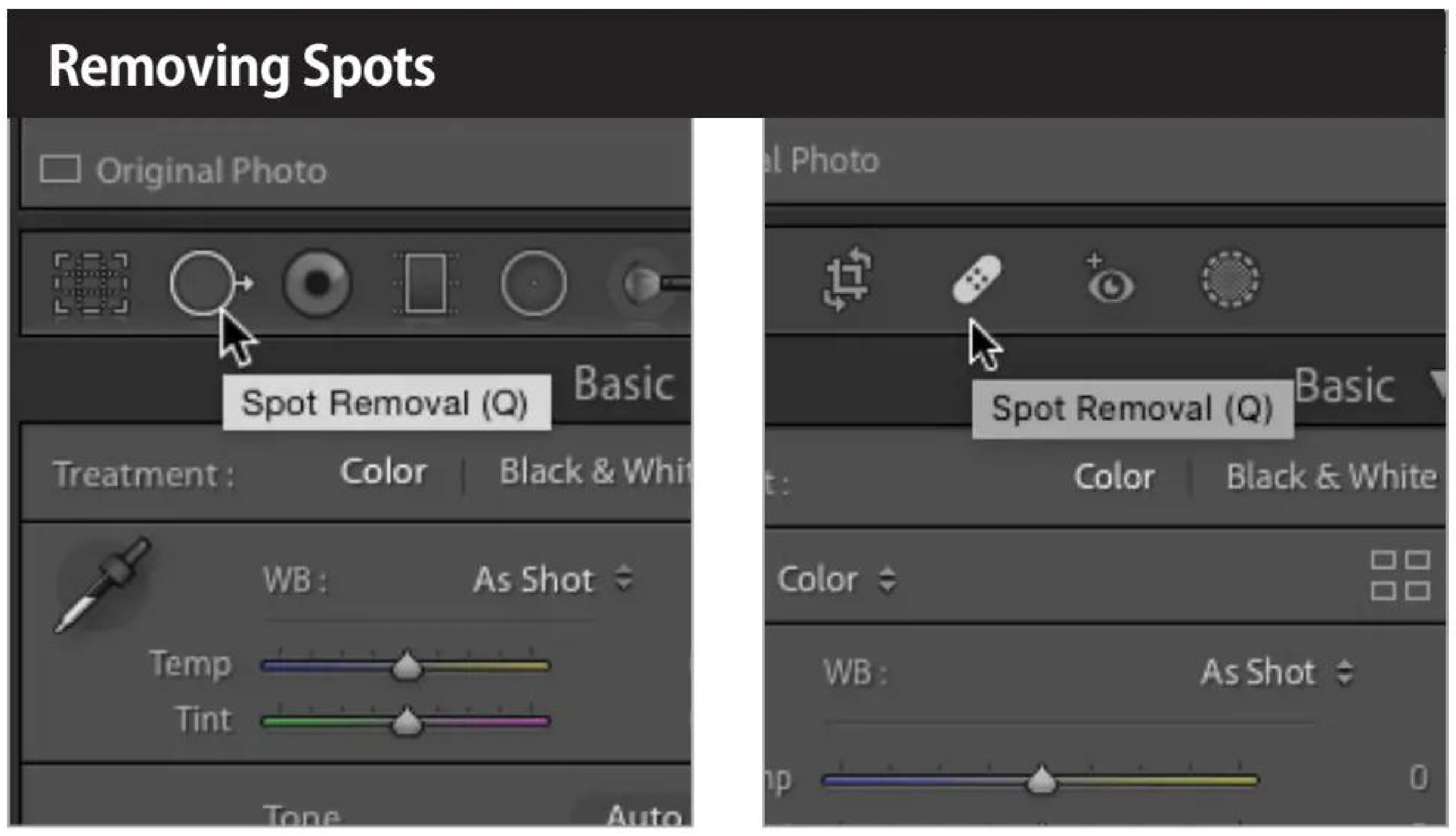
Aspect : Original

As Shot
Original
Custom
1 x 1
4 x 5 / 8 x 10
8.5 x 11
5 x 7
2 x 3 / 4 x 6
4 x 3 1024 x 768
16 x 9 1920 x 1080
16 x 10 1280 x 800
Enter Custom...
Lens Corrections
Transform
Effects

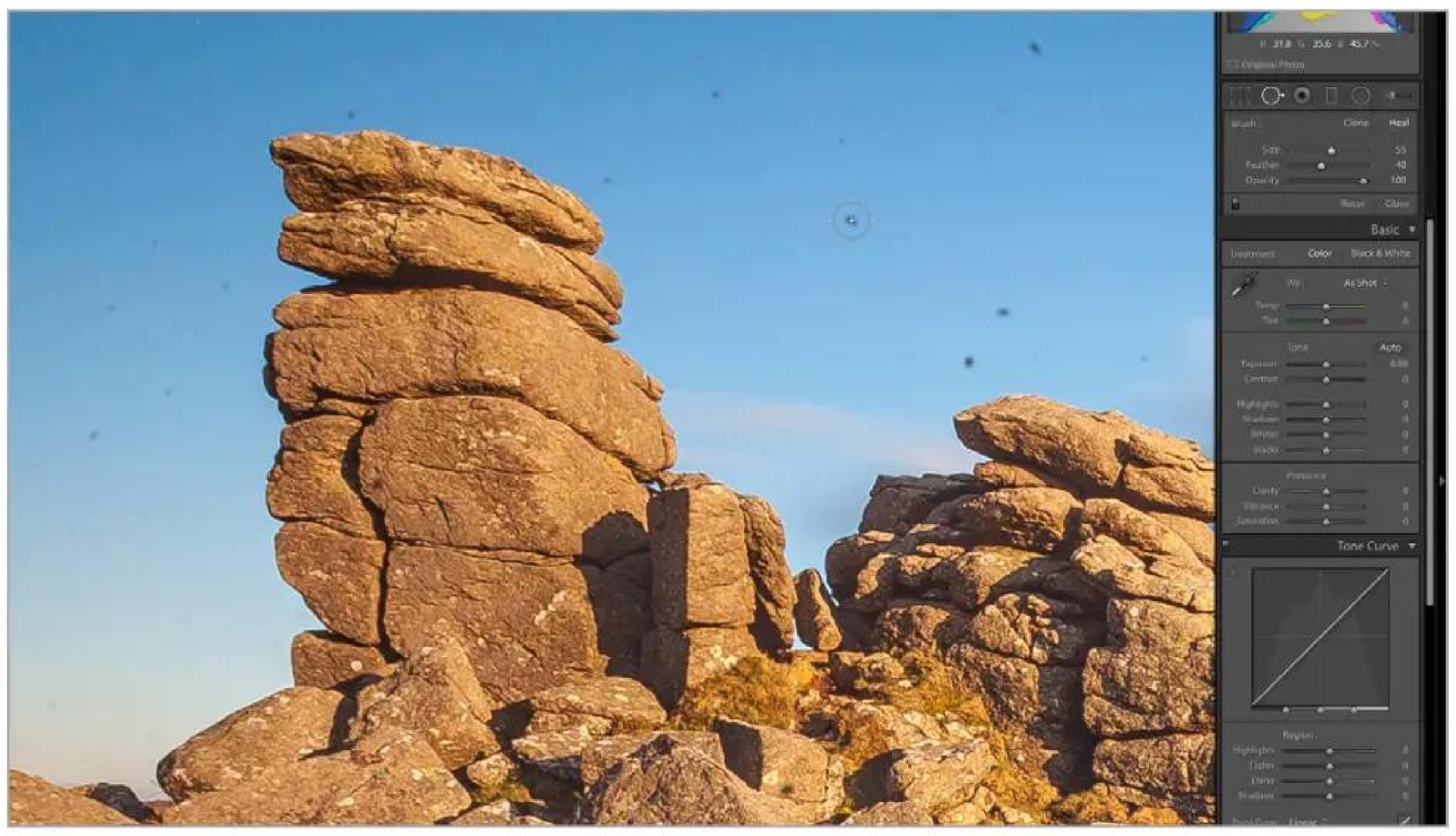
10 You can crop to a specific aspect ratio or image size by clicking to the right of where it says Aspect to open the context menu. You can select a preset ratio or size or enter your own manually. Note that the padlock icon next to the menu changes, to indicate that the aspect ratio is now locked to the dimensions that you've set.

Removing Spots and Red Eye

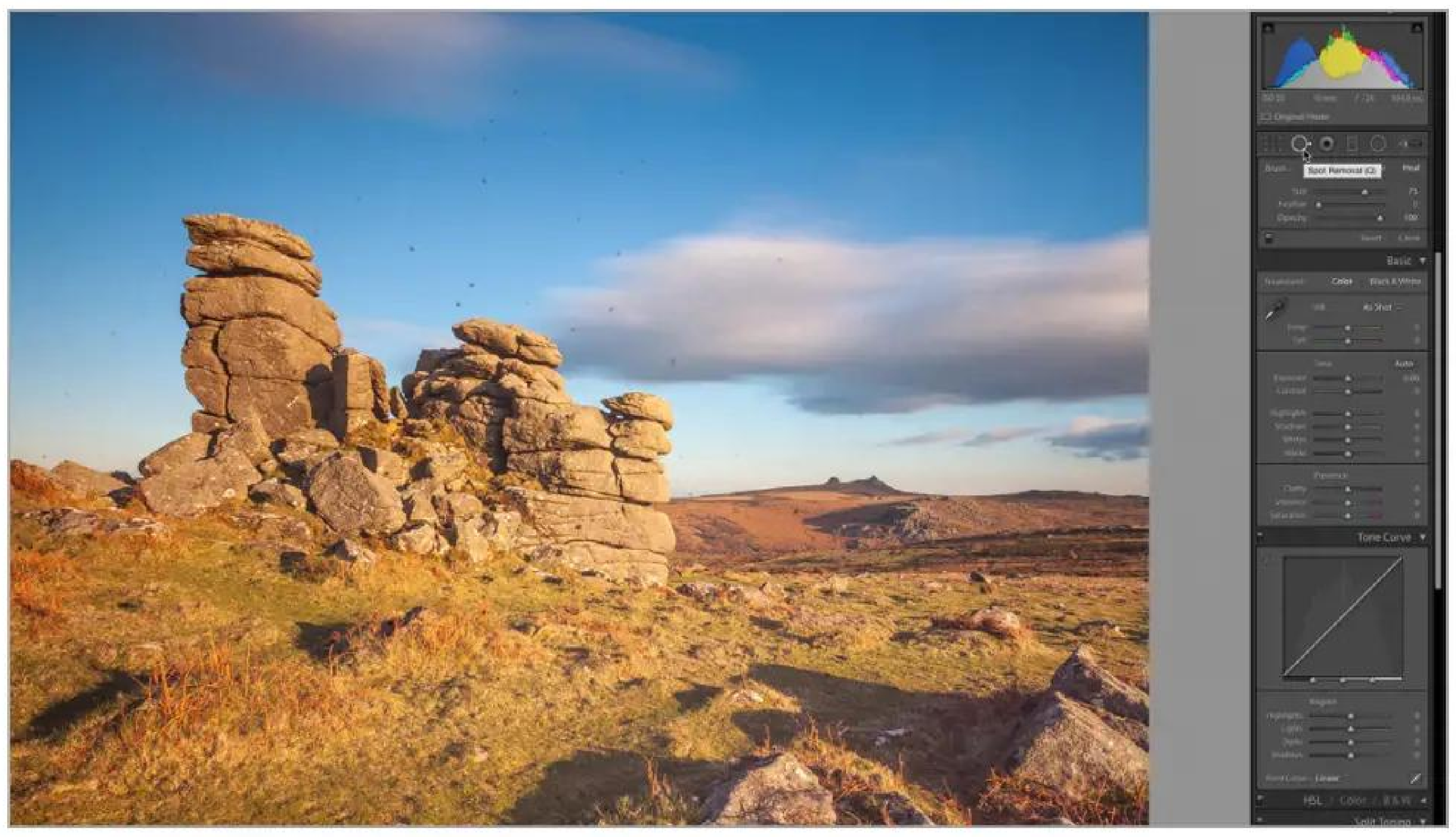
Even the latest digital cameras can sometimes get dust inside and contaminate the sensor, leaving black spots on your images; and there's also the problem of flash Red Eye and indoor photography. Luckily Lightroom offers tools for dealing with these problems.


Removing Spots
Original Photo
Spot Removal (Q)
Basic
Treatment:
Color
Black & White
WB:
As Shot
Temp
Tint
Tone
Auto

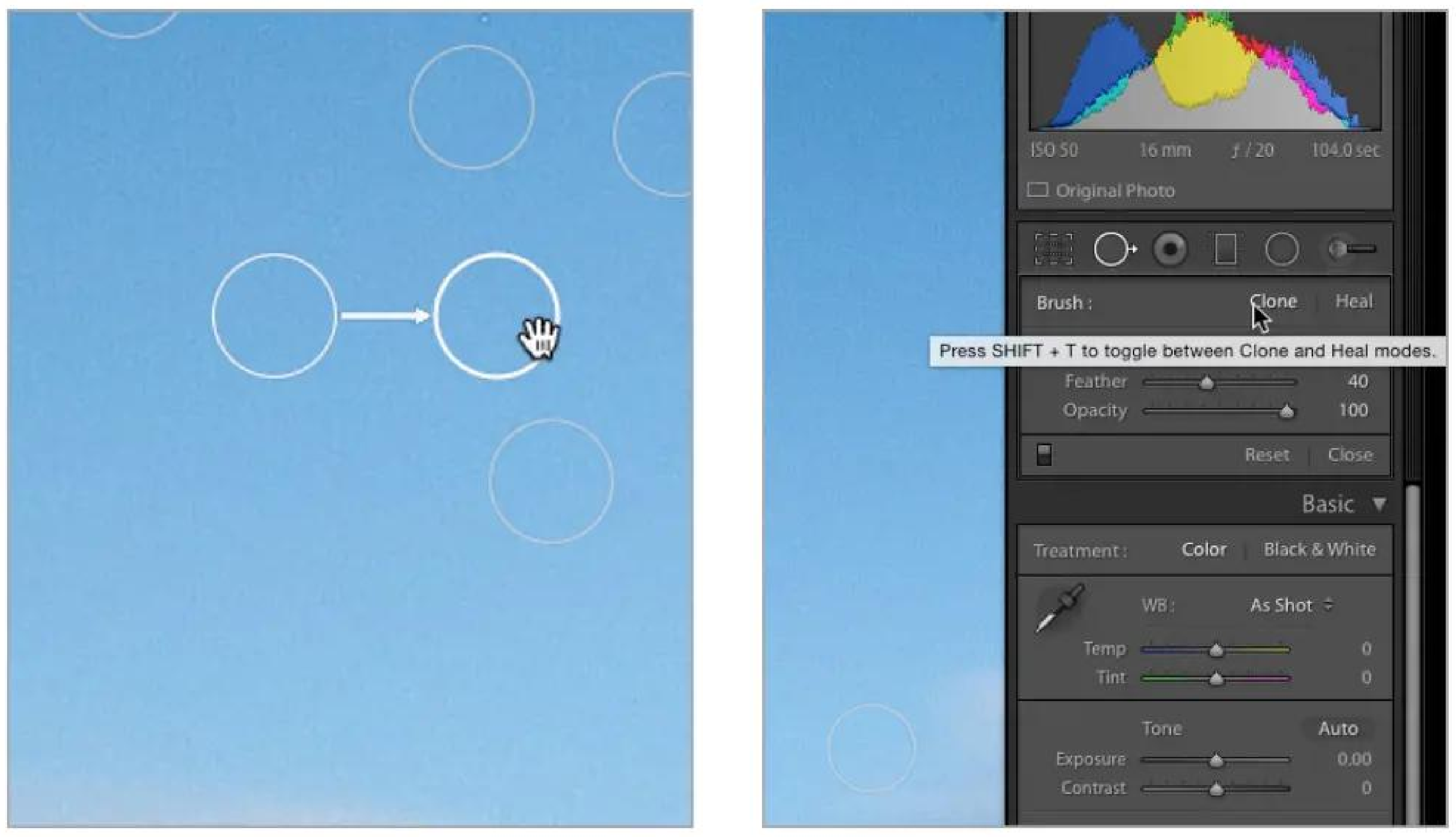
1 If you scan film photos or use an older DSLR, you may have problems with dust and blemishes on your images. Fortunately, Lightroom includes a handy tool to get rid of them. It's the Spot Removal tool and you use it by clicking on the icon in the editing tools panel or by using the keyboard shortcut Q. Note the icon change in the 2022 update.



3 As you click on dust spots you'll see the position from which the replacement sample is being taken displayed on the image and you can adjust the position and size of the sample location by dragging on the visible circle. You can turn this feature off from a pop-up menu on the lower tool bar; this can help if your image is heavily spotted.

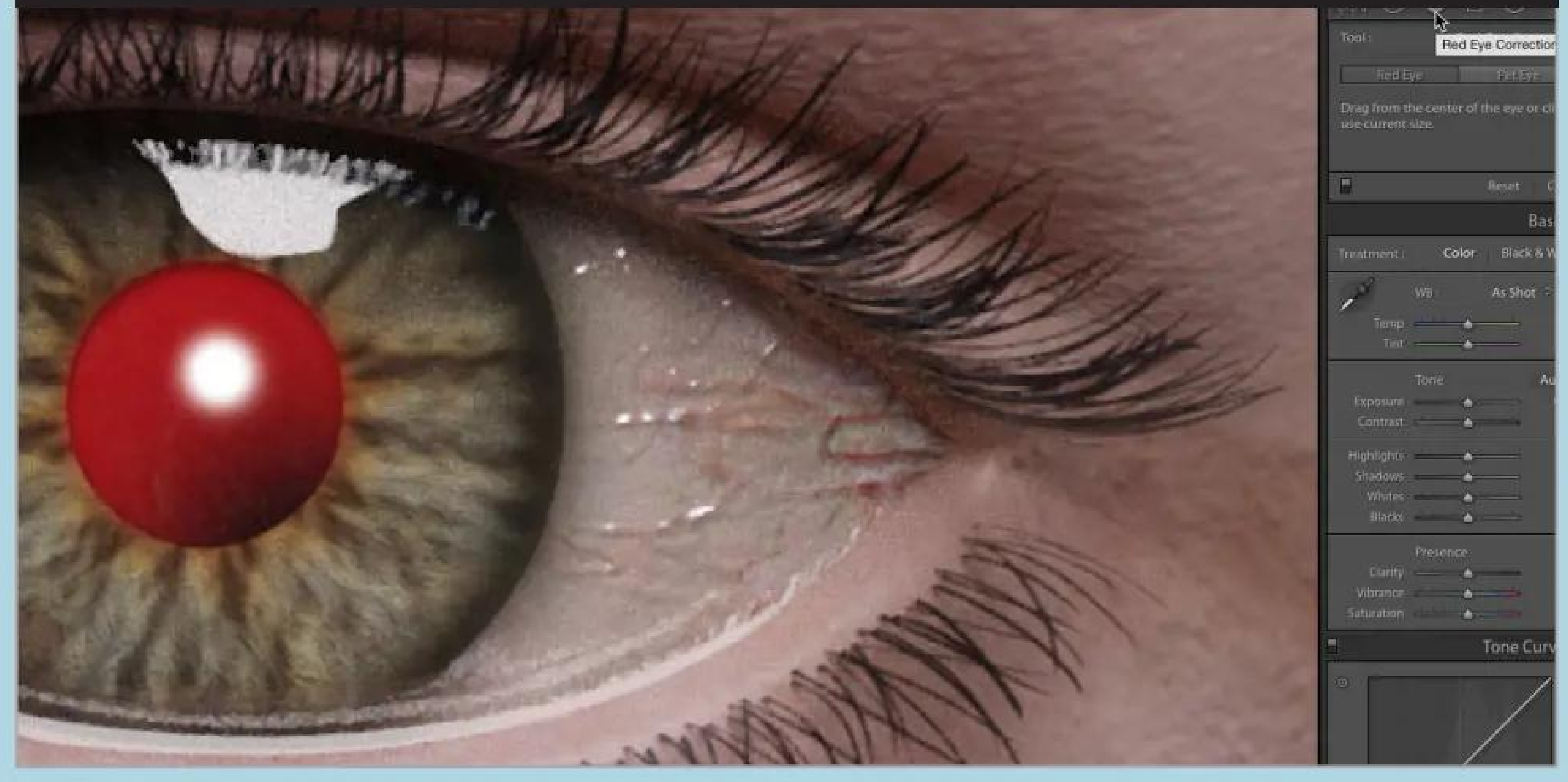


2 The Lightroom Spot Removal tool operates in the same way as the matching tool in Photoshop. You can adjust the brush size by using the slider in the control panel or by using the square brackets keys [and]. Simply click on a spot and it will be replaced by a matching background colour sampled from elsewhere on the image.

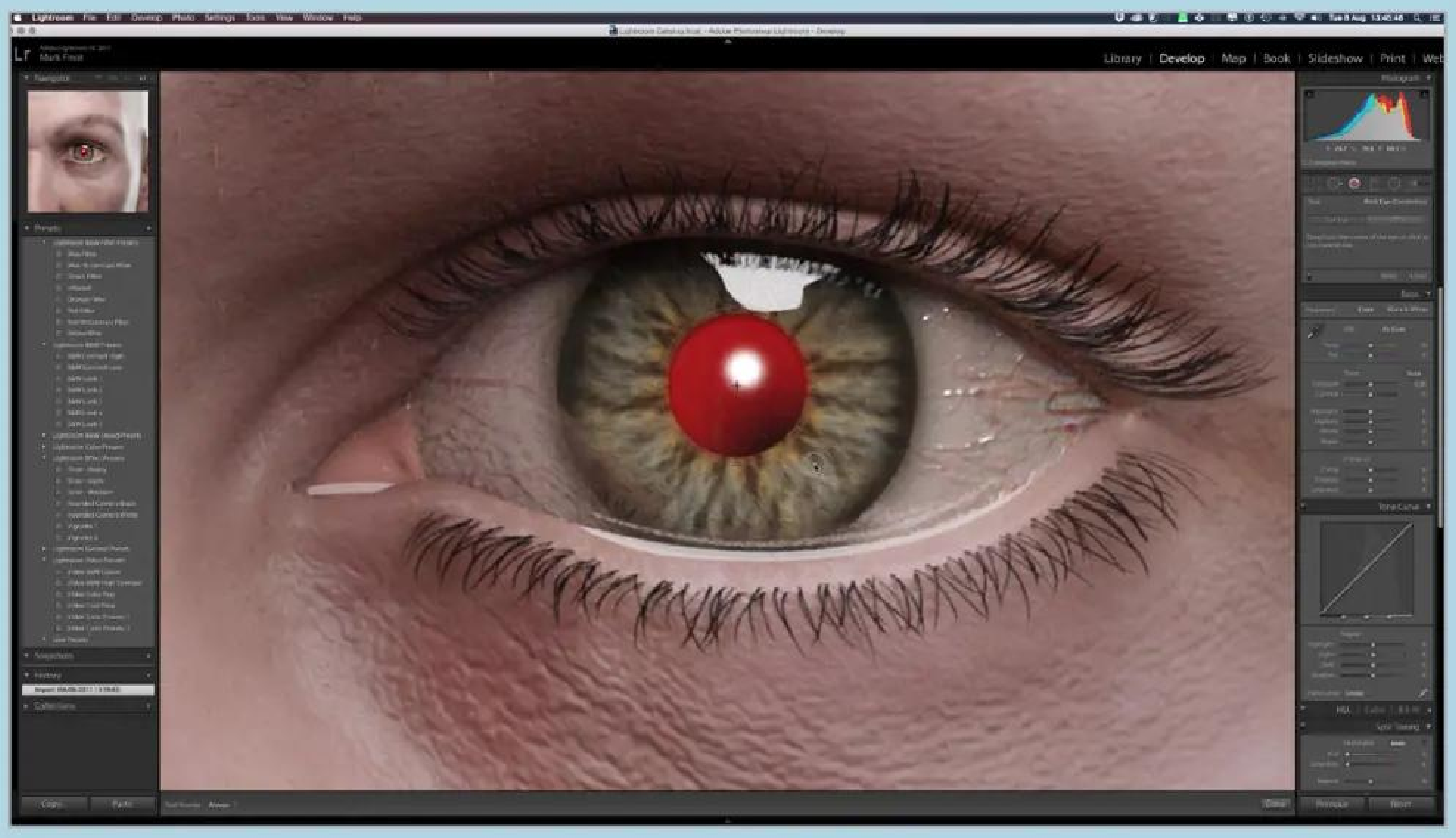

Original Photo
Brush:
Clone
Heal
Press SHIFT + T to toggle between Clone and Heal modes.
Feather
40
Opacity
100
Reset
Close
Basic
Treatment:
Color
Black & White
WB:
As Shot
Temp
Tint
Tone
Auto
Exposure
0.00
Contrast
0

4 If you make a mistake or if you simply don't like the result of one of your spot removal operations, you can undo any of them by holding down the left Alt button and clicking on the offending circle. As well as the heal function, the Spot Removal tool also offers a Clone option. If you hold the CTRL key you can move the sampling point to wherever you want.

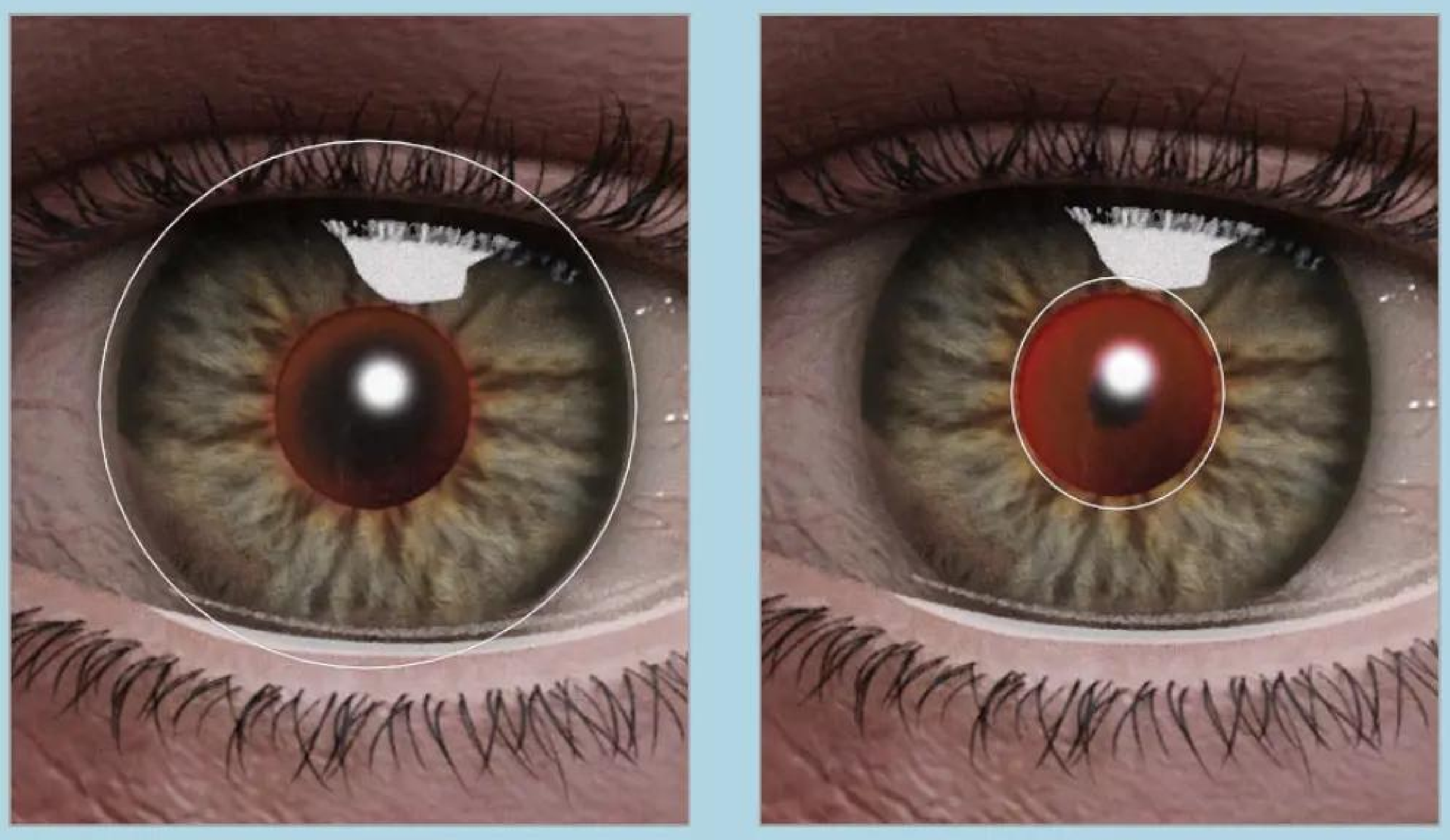
Removing Red Eye



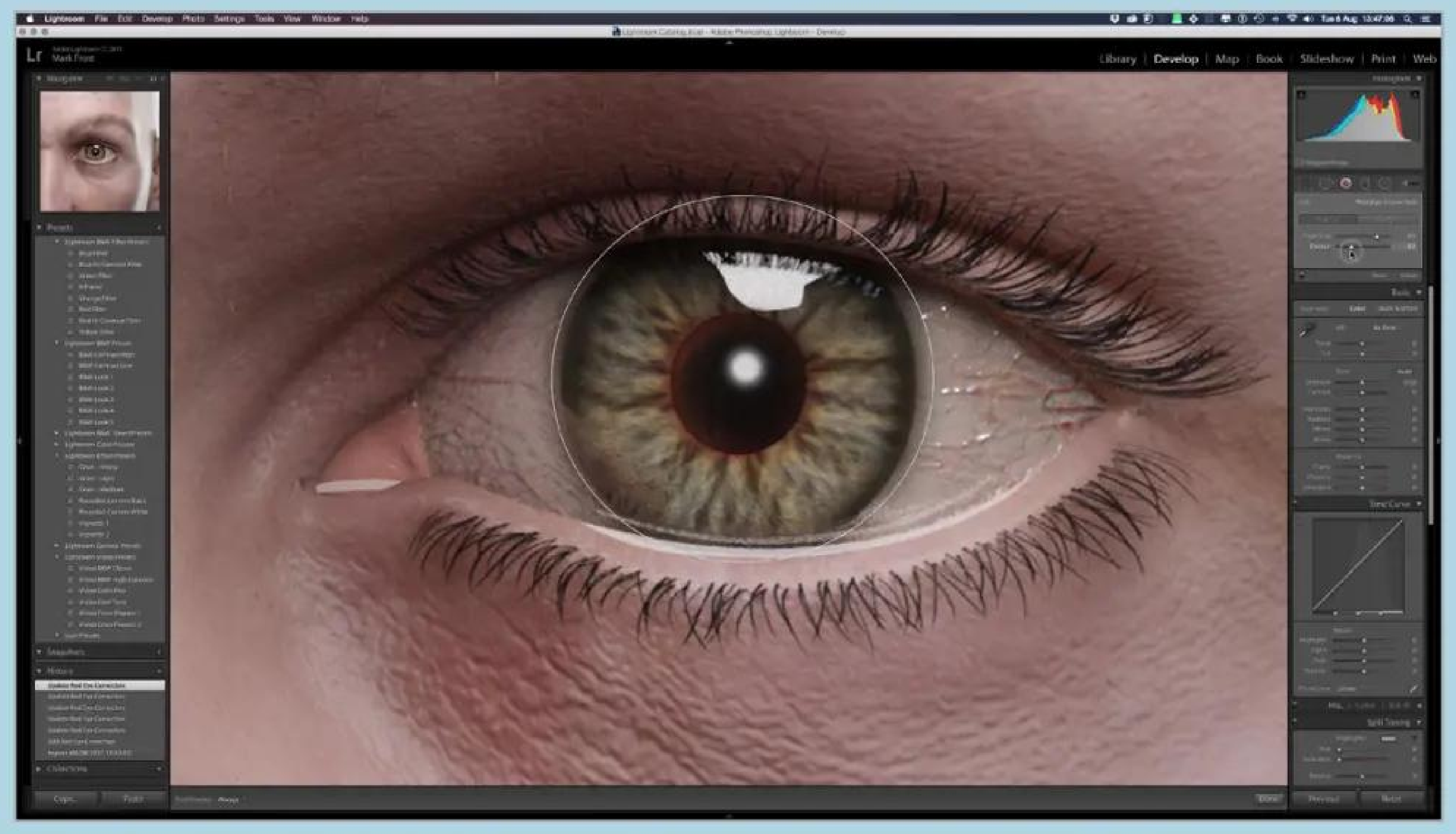
1 Red Eye is caused when light from your camera flash reflects off the blood vessels at the back of the eye and is most visible in low light when the pupils are widely dilated. Even if your flash has anti-Red Eye pre-flash it can still be a problem. You can remove Red Eye from your shots using the Red Eye Removal tool.



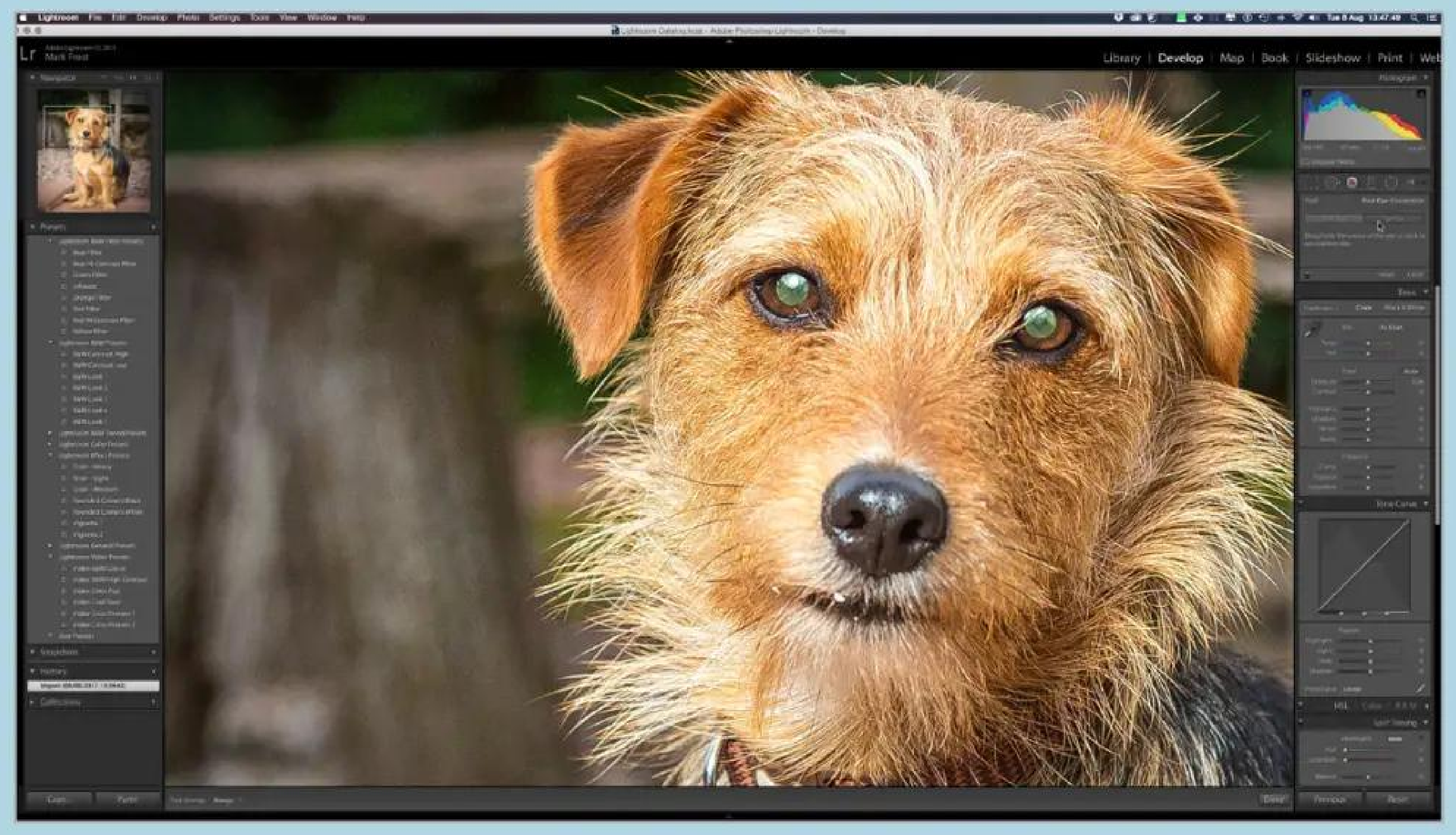
2 The Red Eye Removal tool is very simple to use. When you activate the tool you'll see a cross-shaped mouse cursor. Simply place this over the centre of an affected eye and drag an elliptical shape outwards until it covers the entire eye. Release the Mouse button and the tool will automatically detect and correct the redness.



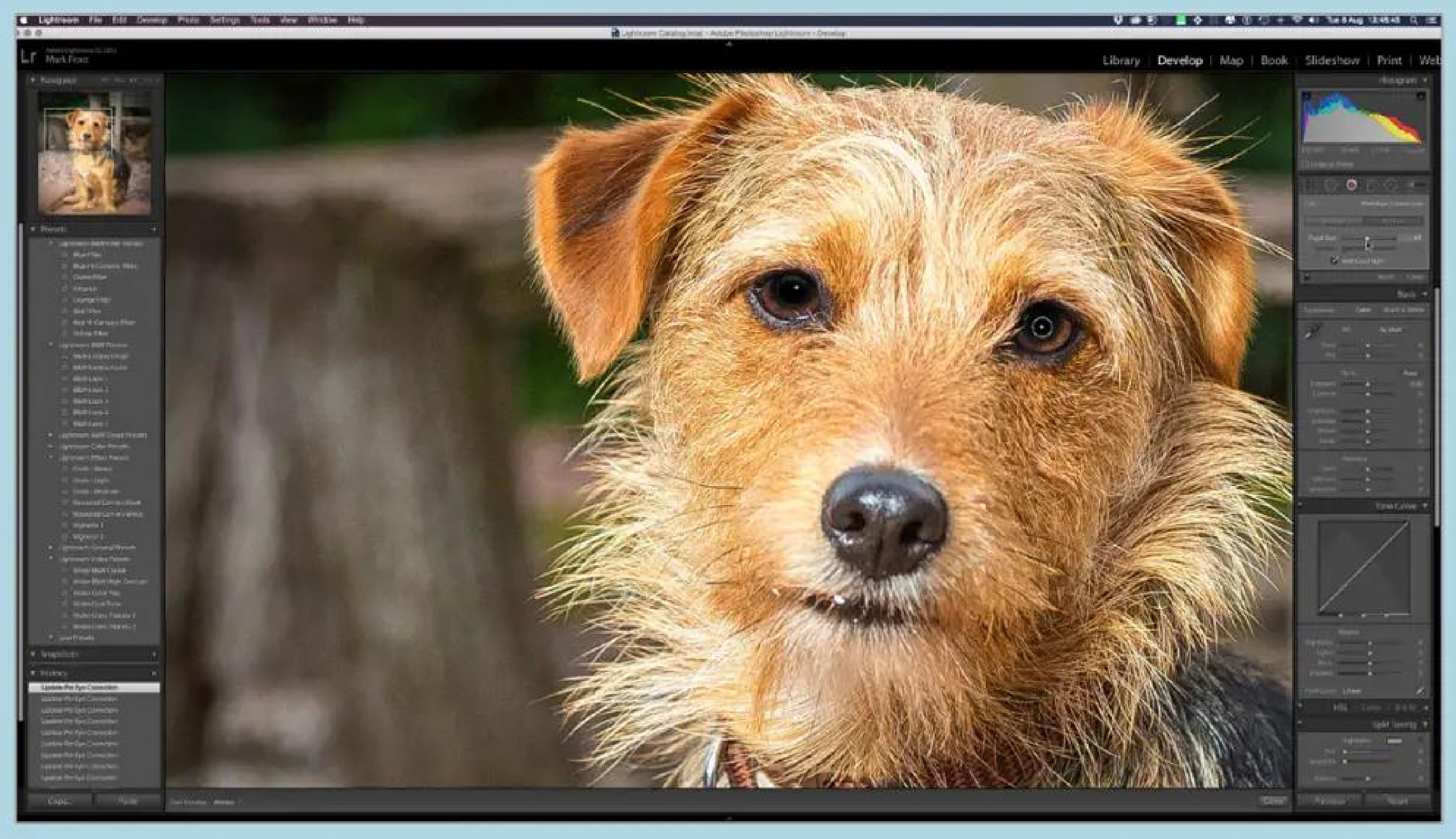
3 As noted above, make sure the elliptical shape covers the entire eye, not just the pupil. You may think you just need to cover the red area of the eye, but the tool works by using the shape of the iris and the pupil. If you drag the ellipse over the pupil alone, you will see that the redness reduction is confined to a very small area. Adjust the ellipse accordingly.



4 Repeat the same procedure with the other eye. If you're not happy with the result, reset the image and try again; the automatic process isn't perfect and a second try may do better. You can also manually adjust the size and darkness of the fake pupil that it superimposes by adjusting the two sliders in the tool options panel.



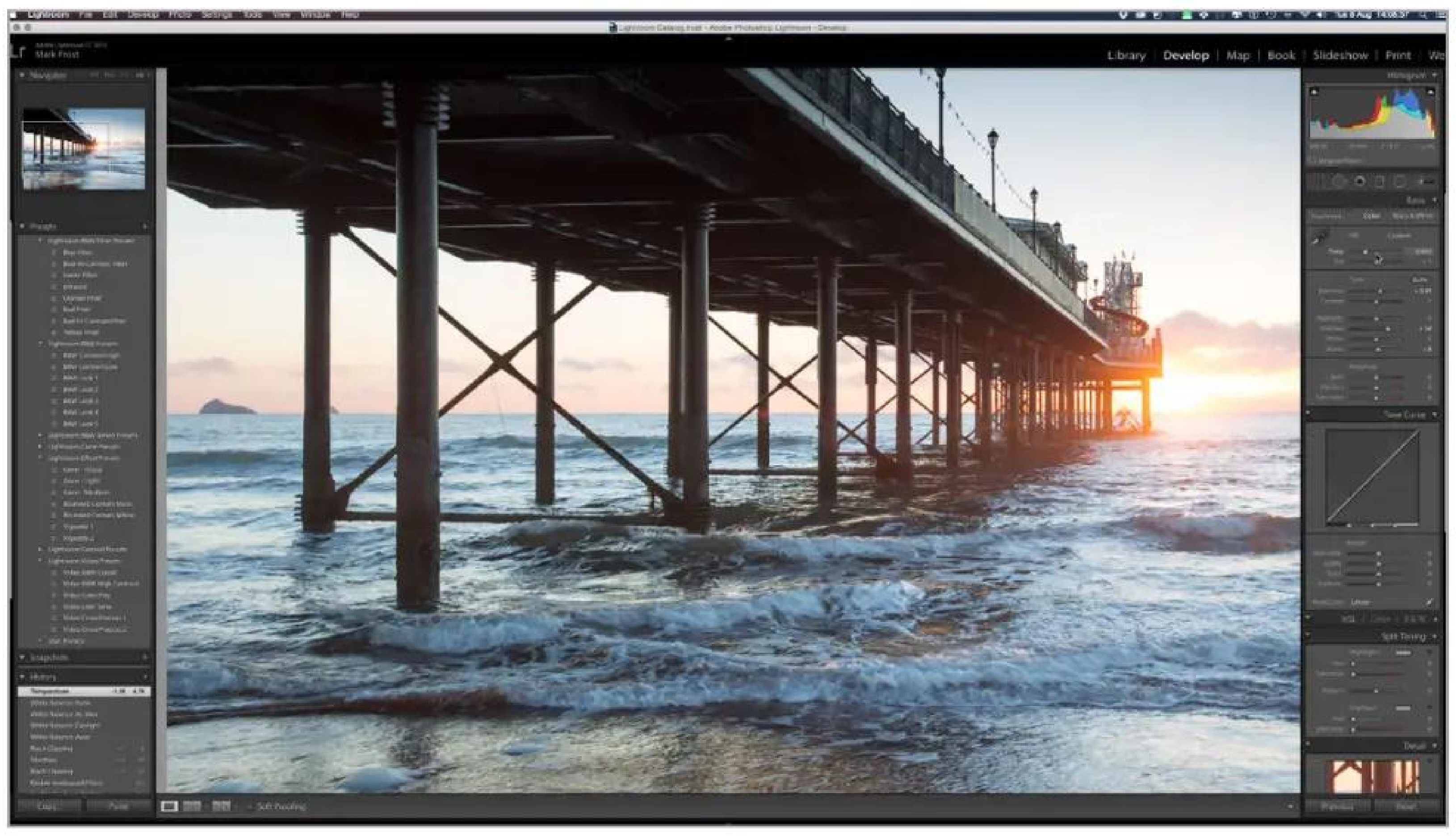
5 The Red Eye Removal tool also works with pet's eyes, although due to the nature of cat and dog eyes, they're usually green or yellow rather than red. Click on the Pet Eye button on the tool option panel and then use the same procedure that you did for a human eye; click and drag outwards from the centre of the eye.



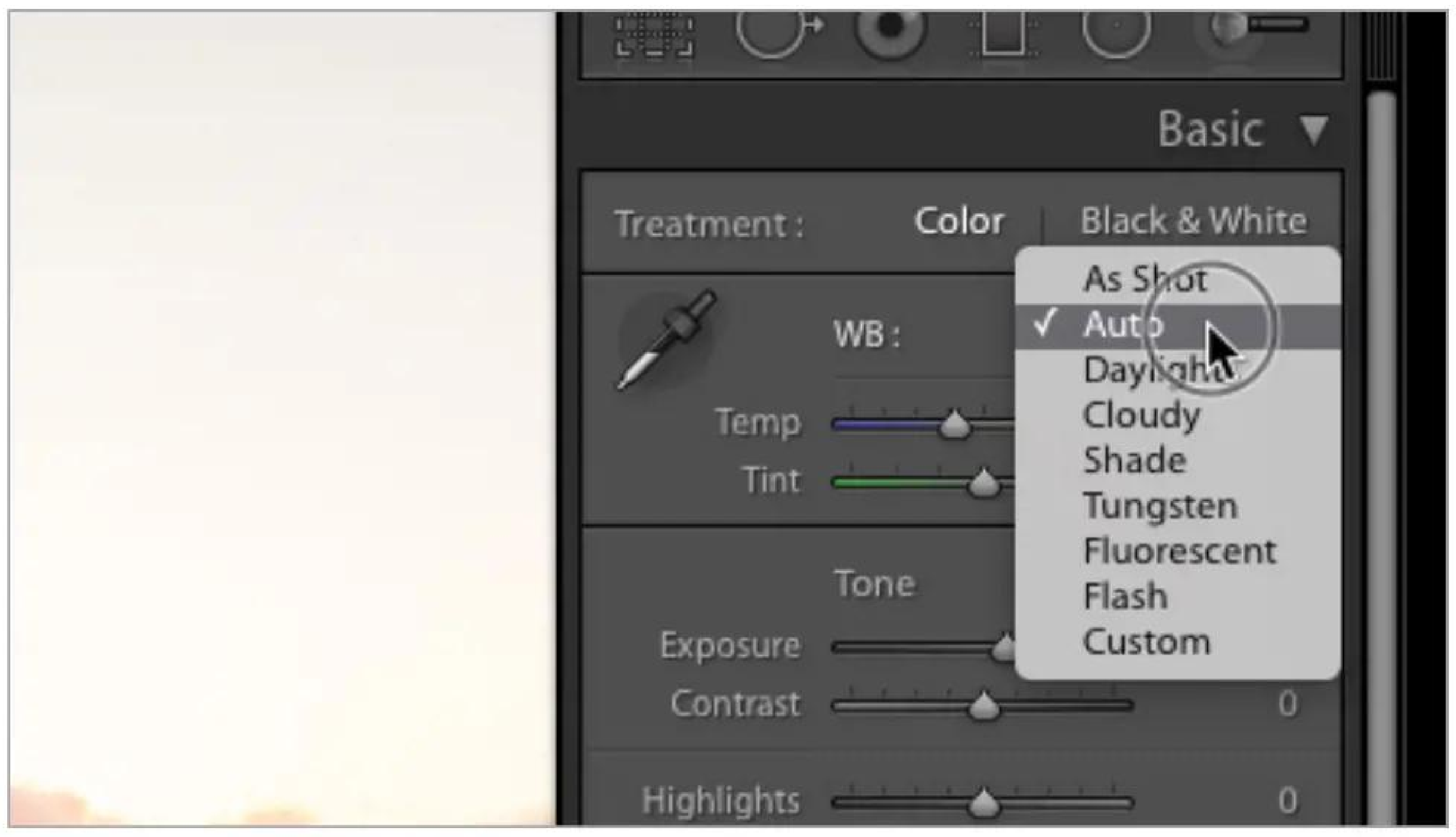
6 As with human eyes you do have the option to manually increase or decrease the pupil size but there is no option to darken, since it will set to maximum darkness automatically. There is an option to add catchlights in the eyes though, which is strangely missing from the tool options for human eyes. The results are usually excellent.

Adjustments Using the Basic Panel

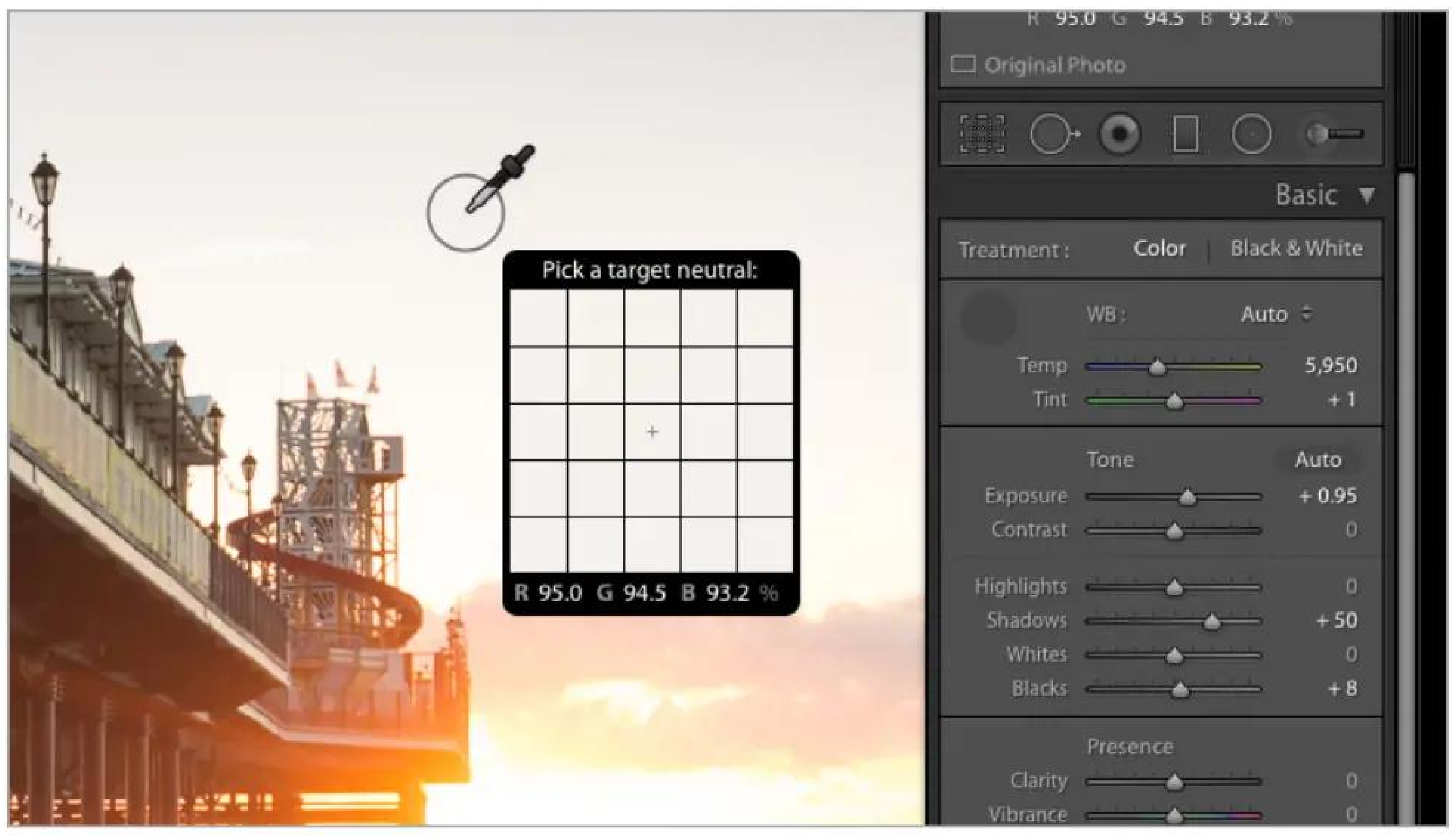
After cropping and straightening, the most common adjustments made are white balance, exposure, tonal balance and colour saturation. Lightroom's Basic panel is where you can find these features, with an easy-to-use slider interface.



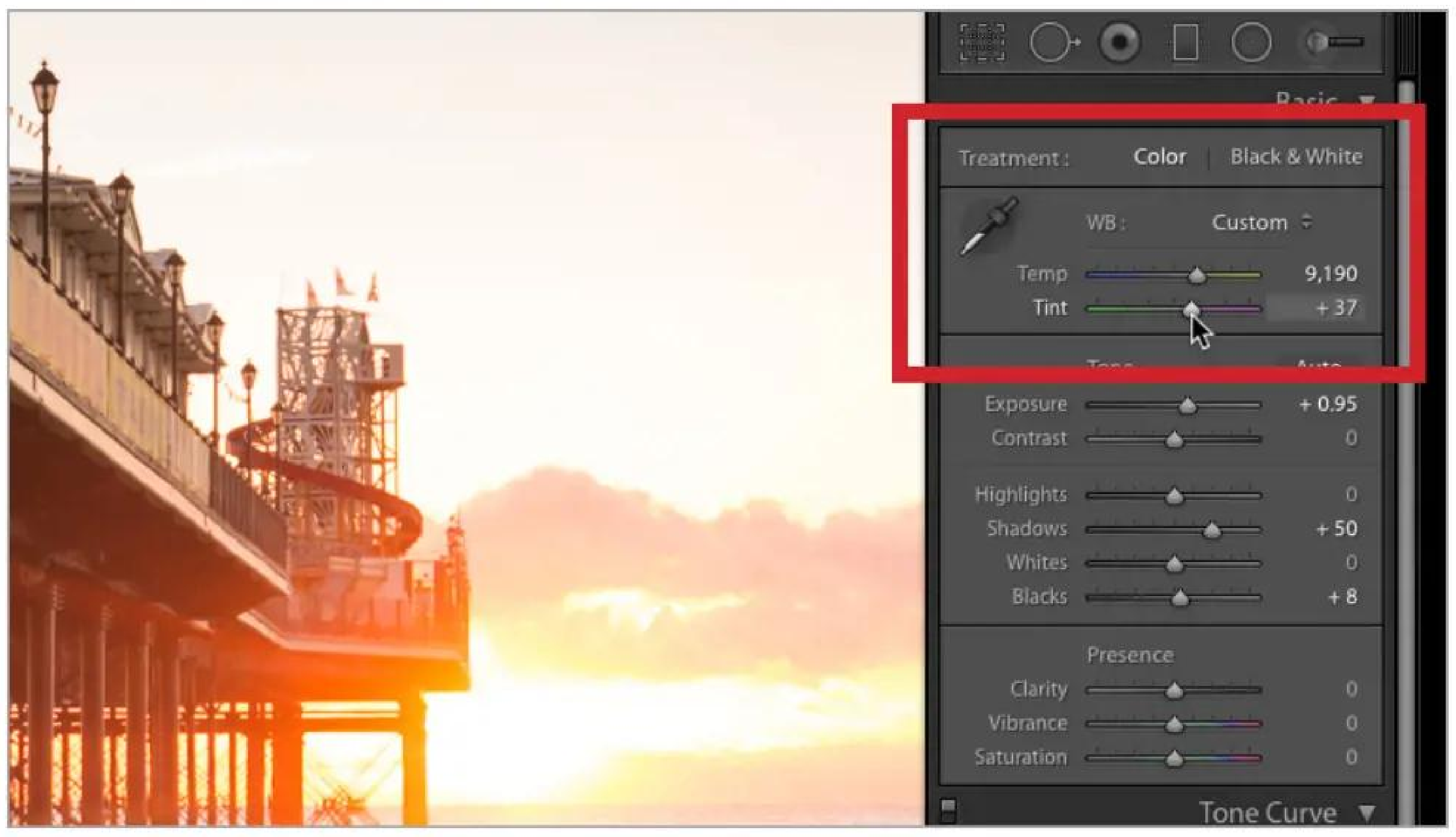
1 You'll find the Basic panel in the right-hand sidebar of the Develop module. Click on the title bar to open the panel and you'll see an array of sliders for things like colour temperature, tint, exposure and contrast; also a panel of Tone controls and another one for Presence controls that adjust Clarity, Vibrance and Saturation.


Basic
Treatment : Color Black & White
WB :
Temp
Tint
As Shot
✓ Auto
Daylight
Cloudy
Shade
Tungsten
Fluorescent
Flash
Custom
Tone
Exposure
Contrast 0
Highlights 0

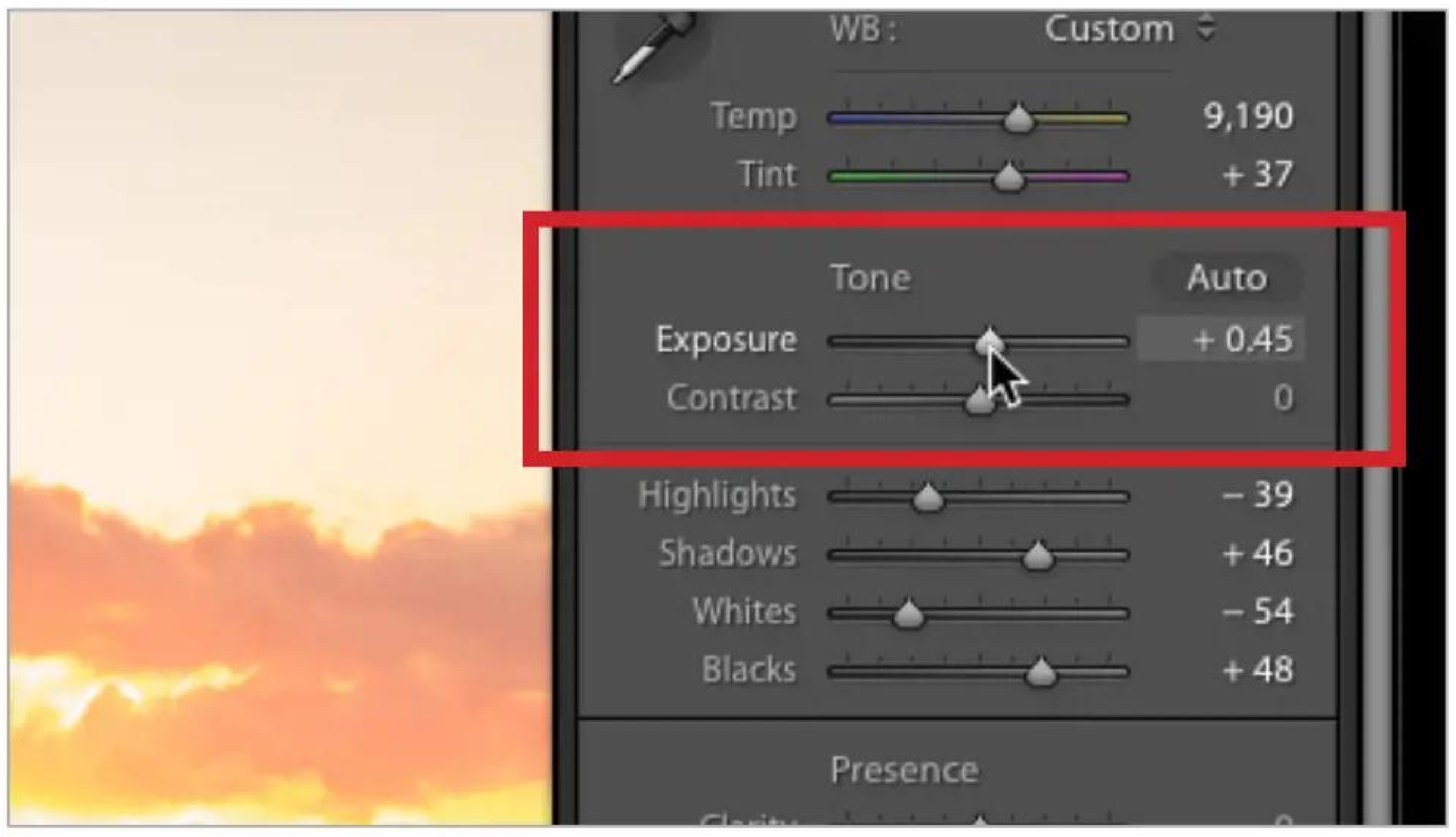
2 Near the top of the Basic panel you'll find the White Balance controls. This will usually show As Shot by default, indicating that Lightroom is using the white balance setting determined by your camera. If you click on this, you'll see a context menu with more options. We'll look more closely at correcting white balance elsewhere.


R 95.0 G 94.5 B 93.2 %
Original Photo
Pick a target neutral:
R 95.0 G 94.5 B 93.2 %
Basic
Treatment : Color Black & White
WB : Auto
Temp 5,950
Tint + 1
Tone Auto
Exposure + 0.95
Contrast 0
Highlights 0
Shadows + 50
Whites 0
Blacks + 8
Presence
Clarity 0
Vibrance 0

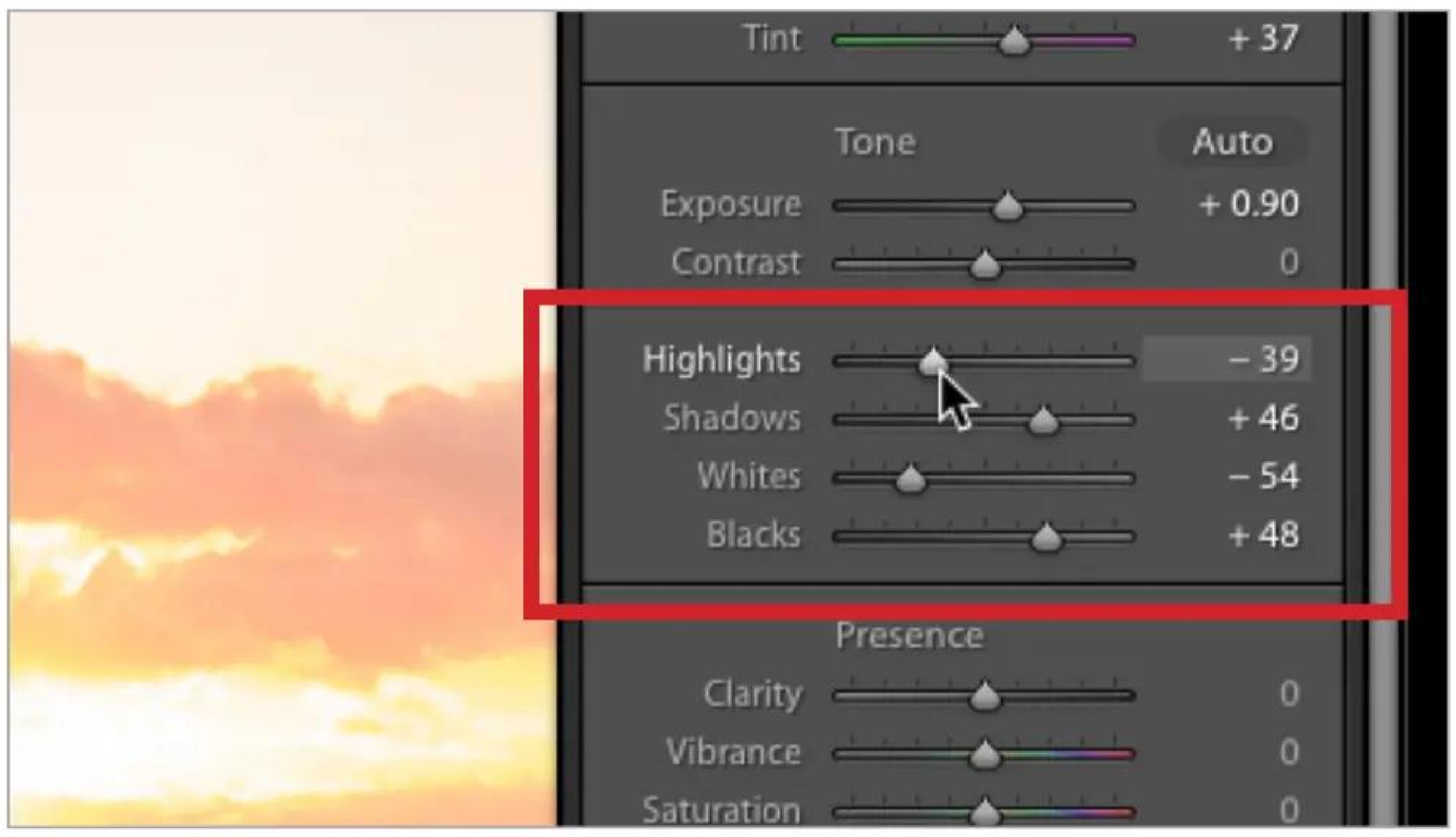
3 To the left of the White Balance selector you'll see another tool with an icon shaped like an eyedropper. If you click on this the eyedropper will become the mouse cursor and you can use it to select a white-point to manually set the white balance. If you've ever used Adobe Camera Raw you'll be familiar with this operation.


Basic
Treatment : Color Black & White
WB : Custom
Temp 9,190
Tint + 37
Exposure + 0.95
Contrast 0
Highlights 0
Shadows + 50
Whites 0
Blacks + 8
Presence
Clarity 0
Vibrance 0
Saturation 0
Tone Curve

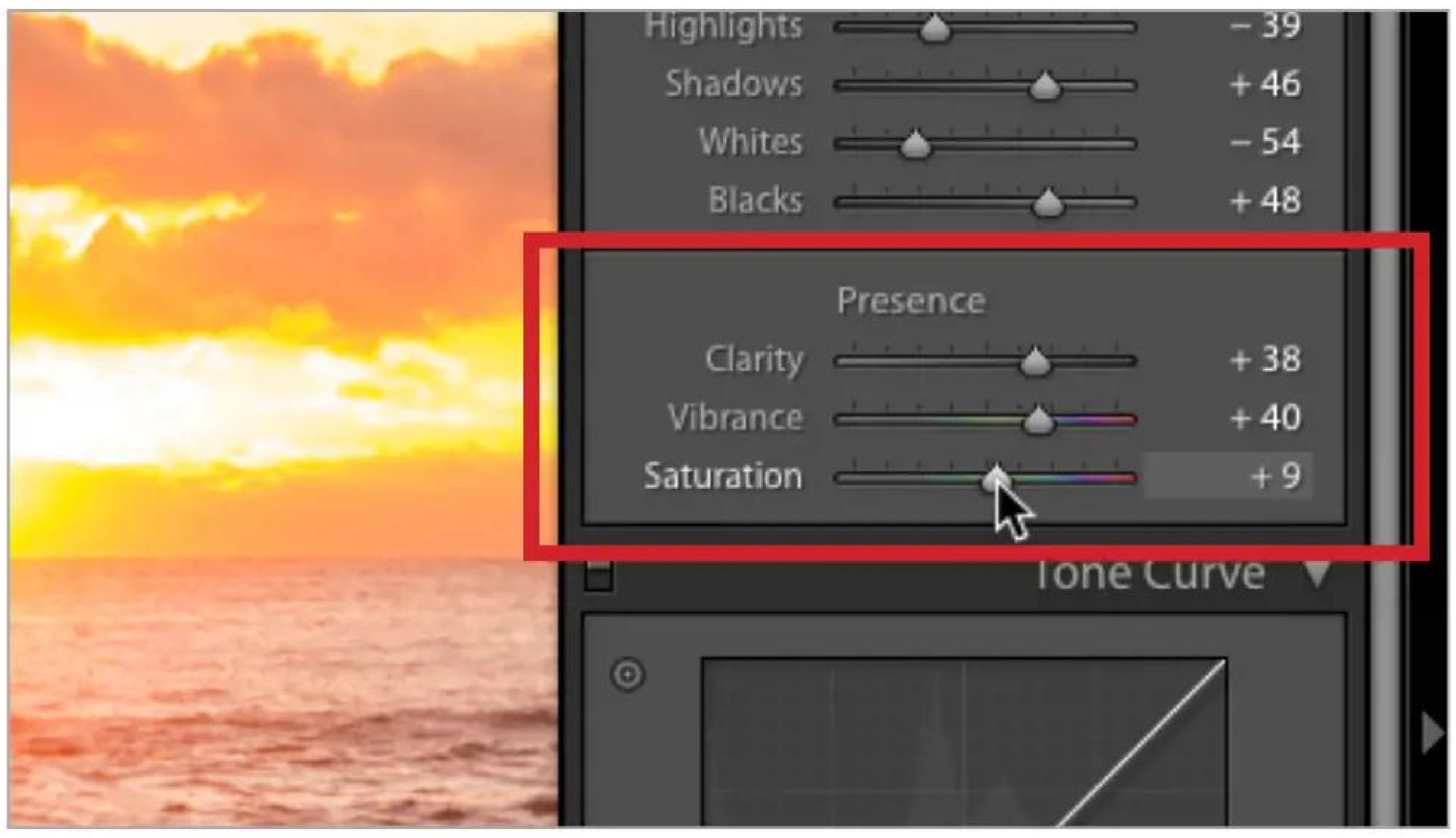
4 Immediately below the White Balance selector you'll see a pair of sliders for Temp, or colour temperature, and Tint. These controls allow you to make manual adjustments to the white balance and colour cast, which is useful if you're shooting under unusual artificial lighting conditions that are not covered by any of the white balance presets.


WB: Custom
Temp 9,190
Tint + 37
Tone Auto
Exposure + 0.45
Contrast 0
Highlights − 39
Shadows + 46
Whites − 54
Blacks + 48
Presence

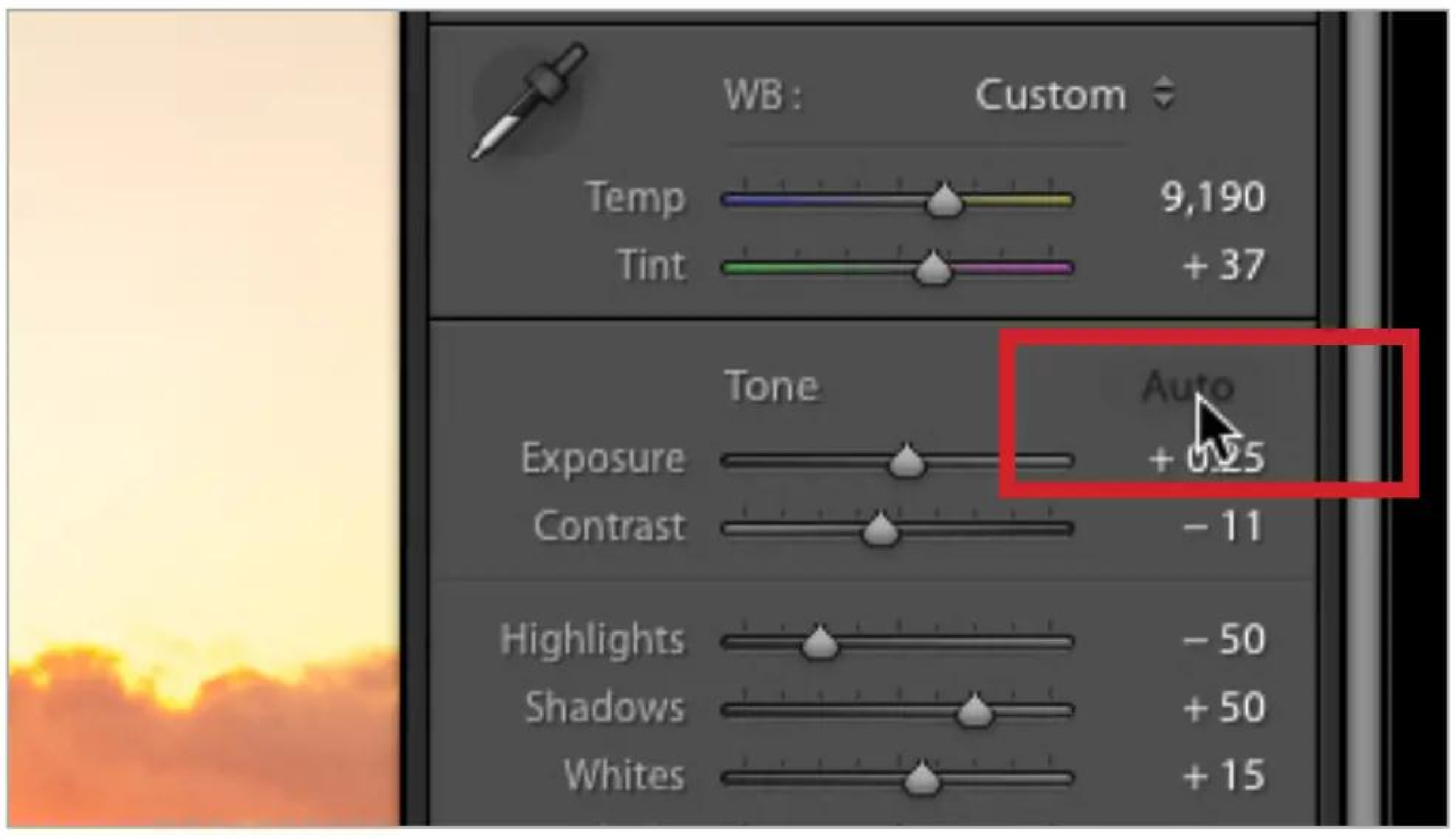
5 Moving further down the panel, we come to the Tone controls, which are divided into two sections; Exposure and Contrast, and Highlights, Shadows, Whites and Blacks. Exposure and Contrast work in exactly the same way that they have done in Adobe Photoshop and most other editing suites for years.


Tint + 37
Tone Auto
Exposure + 0.90
Contrast 0
Highlights − 39
Shadows + 46
Whites − 54
Blacks + 48
Presence
Clarity 0
Vibrance 0
Saturation 0

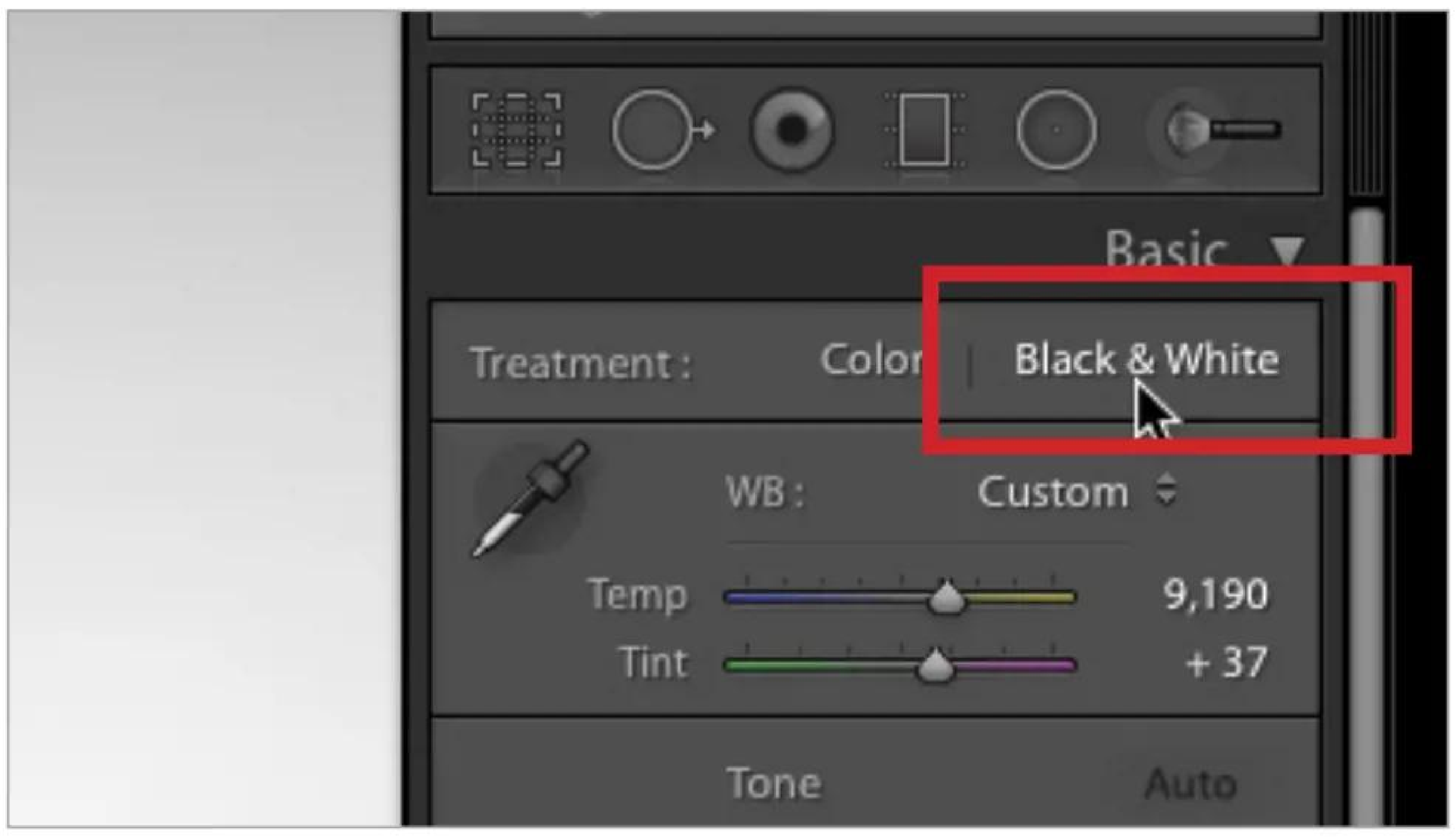
6 The Highlights, Shadows, Whites and Blacks section of the Tone panel is a more recent addition for Lightroom and not found in previous versions of Photoshop. It offers more precise manual control over the relative density of light and dark tones and lets you take advantage of the greater tonal range of raw files.


Highlights − 39
Shadows + 46
Whites − 54
Blacks + 48
Presence
Clarity + 38
Vibrance + 40
Saturation + 9
Tone Curve

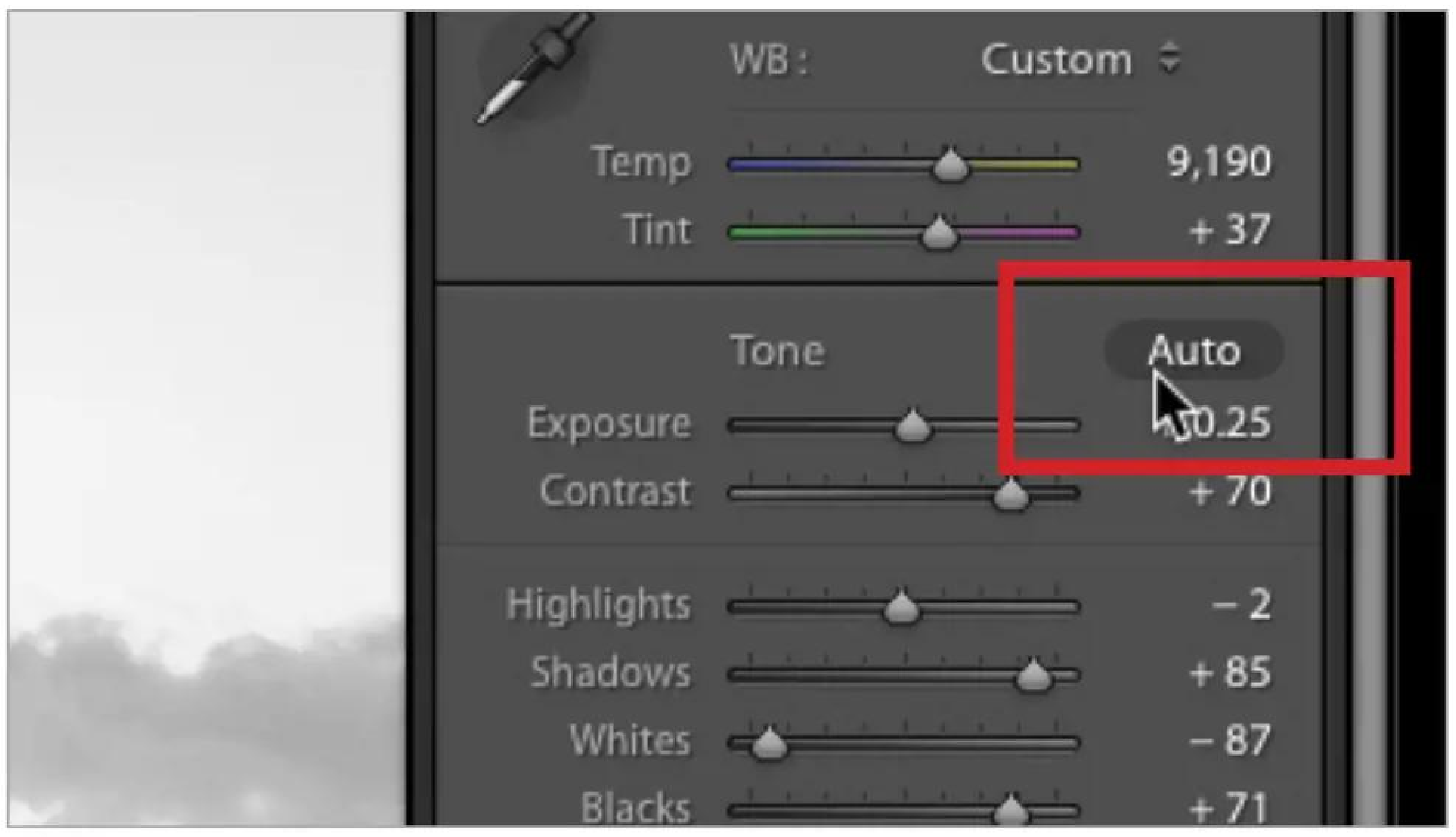
7 The Presence controls are another new Lightroom feature and replace the old Hue, Saturation and Lightness controls that feature in Photoshop. Clarity improves the contrast in the mid-tones of the image by sharpening the edge detail, while Vibrance increases the saturation of only the least saturated colours.


WB: Custom
Temp 9,190
Tint + 37
Tone Auto
Exposure + 0.25
Contrast − 11
Highlights − 50
Shadows + 50
Whites + 15

8 If you just want to quickly optimise a photo but aren't sure in which direction to take it, the Basic panel offers an auto-tone option that will instantly analyse your image and attempt to adjust the tone to bring it closer to an idealised average by equalising the histogram. It's not likely to be perfect but can be a good starting point.


Basic
Treatment: Color | Black & White
WB: Custom
Temp 9,190
Tint + 37
Tone Auto

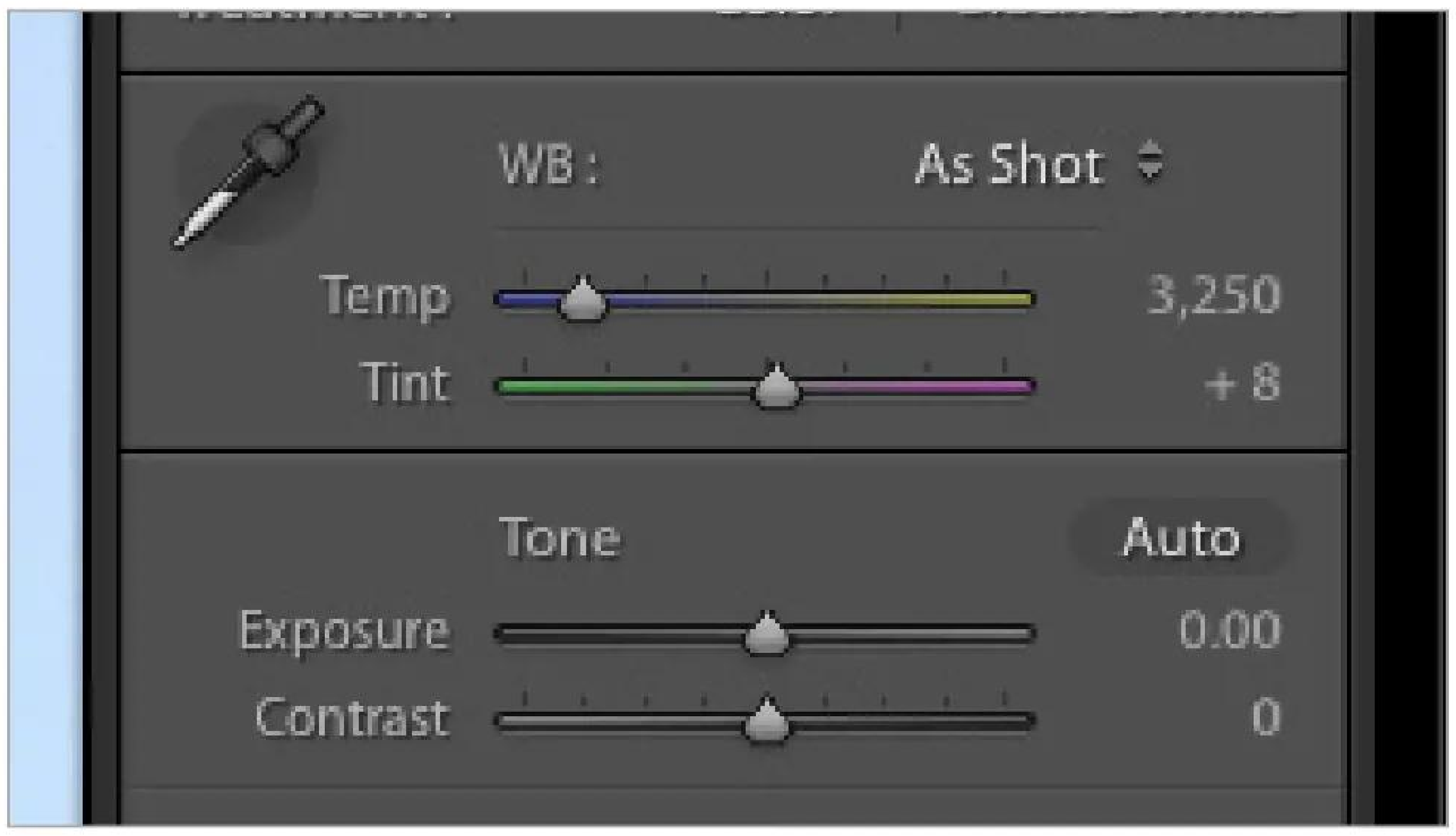
9 The Basic panel can also be used to turn your colour image into monochrome. At the top of the panel you'll see Colour and Black & White. If you click on the latter you'll see that the Vibrance and Saturation slider will be greyed out and the image will turn monochrome. You still have full control over the other sliders.


WB: Custom
Temp 9,190
Tint + 37
Tone Auto
Exposure + 0.25
Contrast + 70
Highlights − 2
Shadows + 85
Whites − 87
Blacks + 71

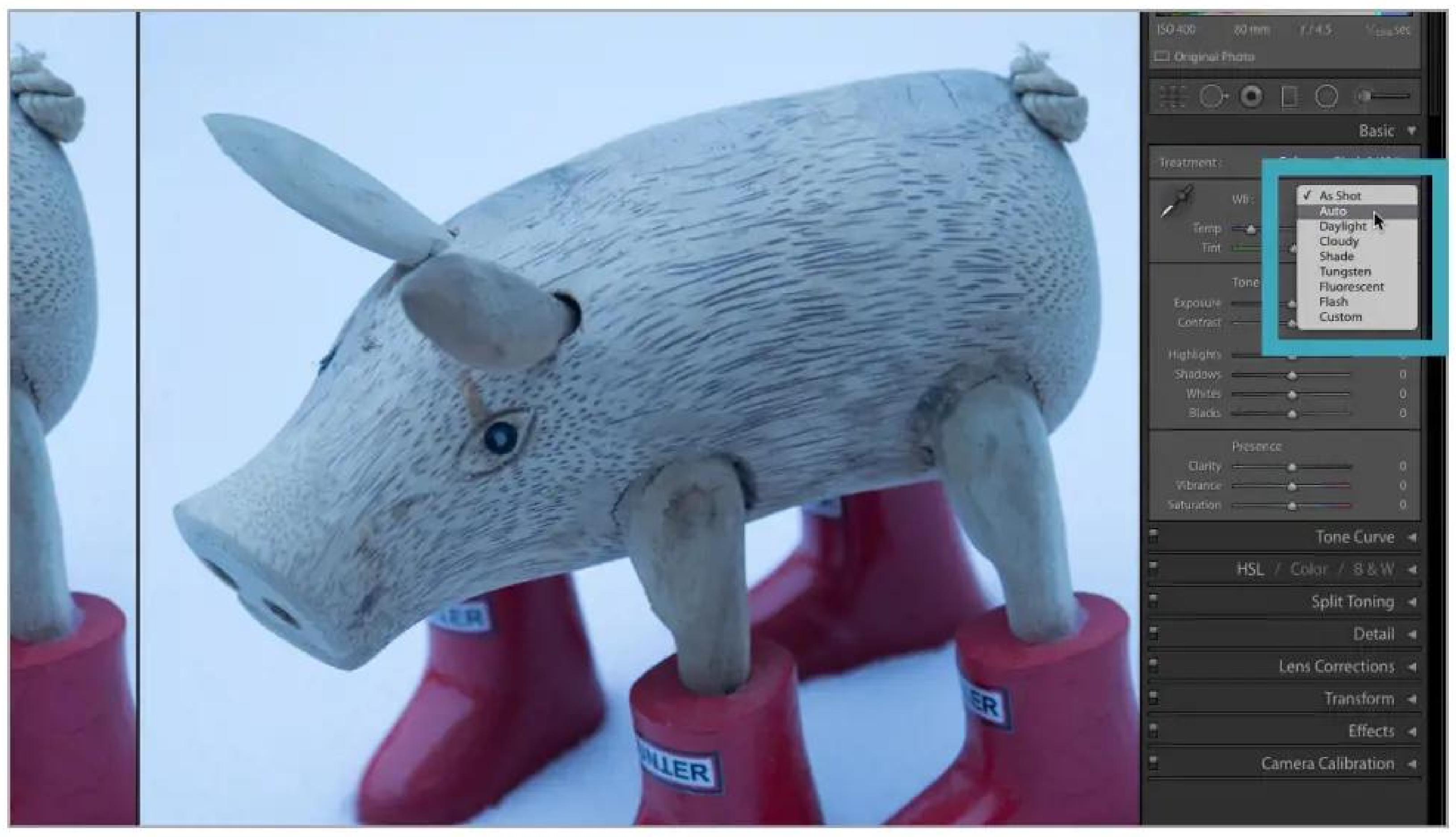
10 Auto-tone also still works in Black & White mode and just like in colour mode it will attempt to equalise the exposure, contrast and distribution of tones to produce an idealised histogram with no clipping. You may find that the results look a little flat though, so use it as a starting point rather than relying on it to finish your images.

Adjusting the White Balance

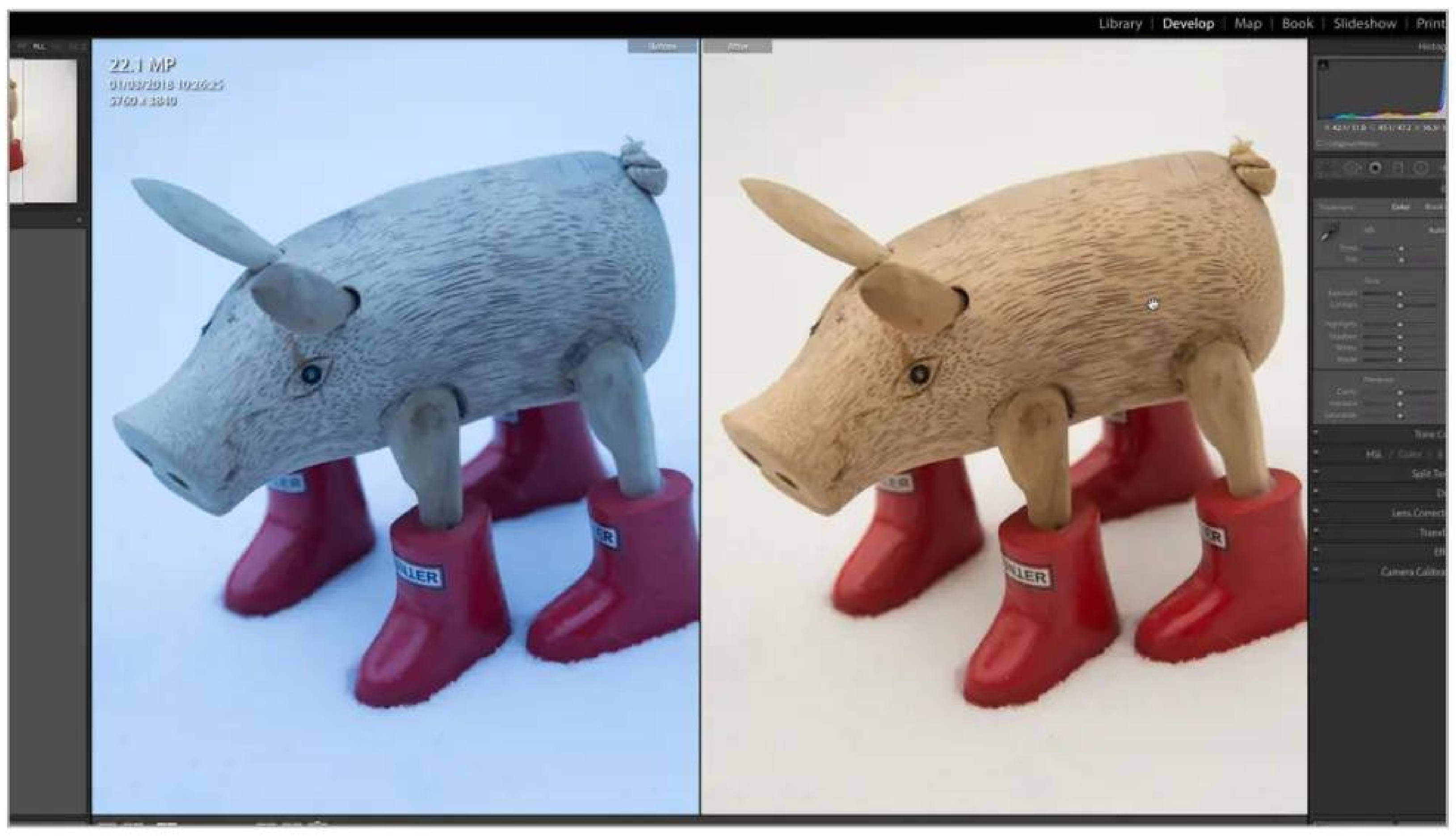
Even as an experienced photographer using a modern top of the range digital SLR, it's sometimes possible to mess up your white balance. Luckily, if you shoot in Raw and use Lightroom, it's very easy to correct any such mistakes.


WB : As Shot
Temp 3,250
Tint + 8
Tone Auto
Exposure 0.00
Contrast 0

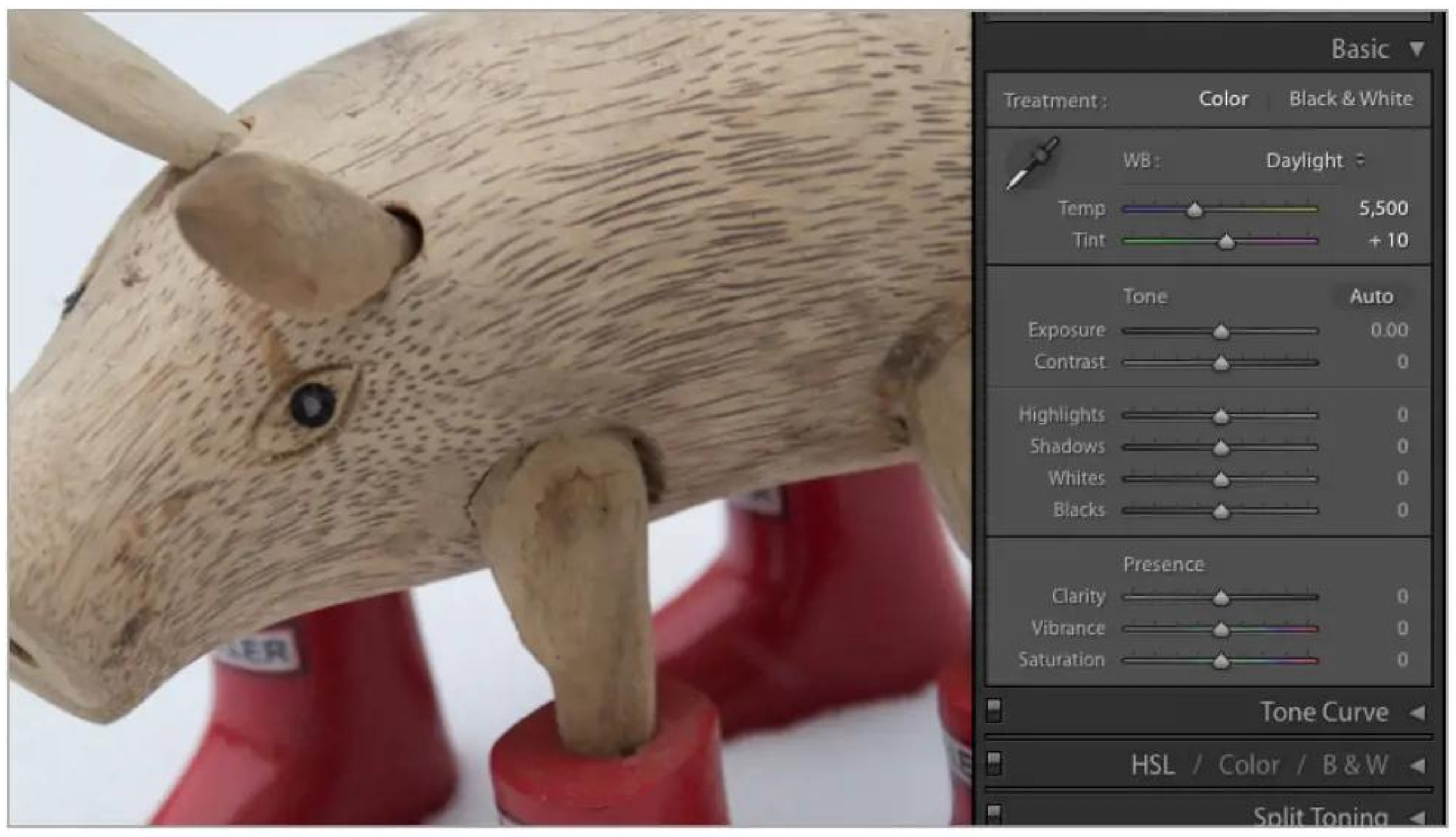
1 You can spot an incorrectly set white balance straight away by the colour cast over the entire image. Open the Basic panel and look at the white balance setting; you can see it's 'As Shot' and that the colour temperature is 3250K, a typical setting for incandescent or tungsten lighting. The camera was incorrectly set when the shot was taken.


Basic
As Shot
Auto
Daylight
Cloudy
Shade
Tungsten
Fluorescent
Flash
Custom
Tone Curve
HSL / Color / B & W
Split Toning
Detail
Lens Corrections
Transform
Effects
Camera Calibration

2 The quickest way to correct the white balance is to let Lightroom do it automatically. Click on the white balance setting and you'll see a drop-down menu appear. Select Auto and Lightroom will analyse the photo and attempt to set the correct balance based on the histogram. The results will usually be good for most common lighting.

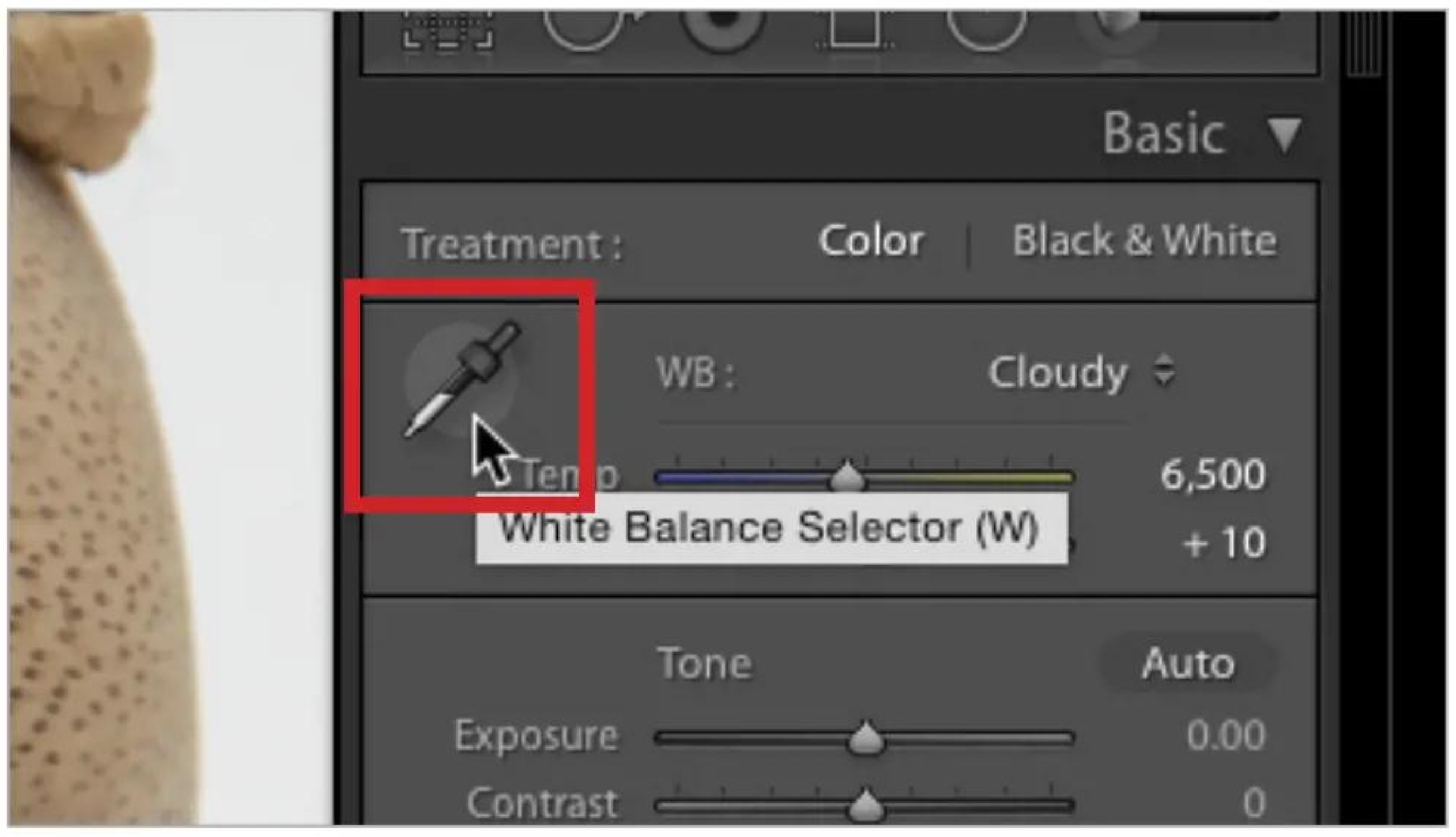

Library | Develop | Map | Book | Slideshow | Print

3 As you can see, the results are pretty good in this example. Lightroom has selected a colour temperature of 7250K and a tint setting of +9, adding magenta to offset the blue tint of the original. However, since we know this shot was taken in daylight, we could try the Daylight preset from the menu to see if it's better.


Basic
Treatment : Color Black & White
WB : Daylight
Temp 5,500
Tint + 10
Tone Auto
Exposure 0.00
Contrast 0
Highlights 0
Shadows 0
Whites 0
Blacks 0
Presence
Clarity 0
Vibrance 0
Saturation 0

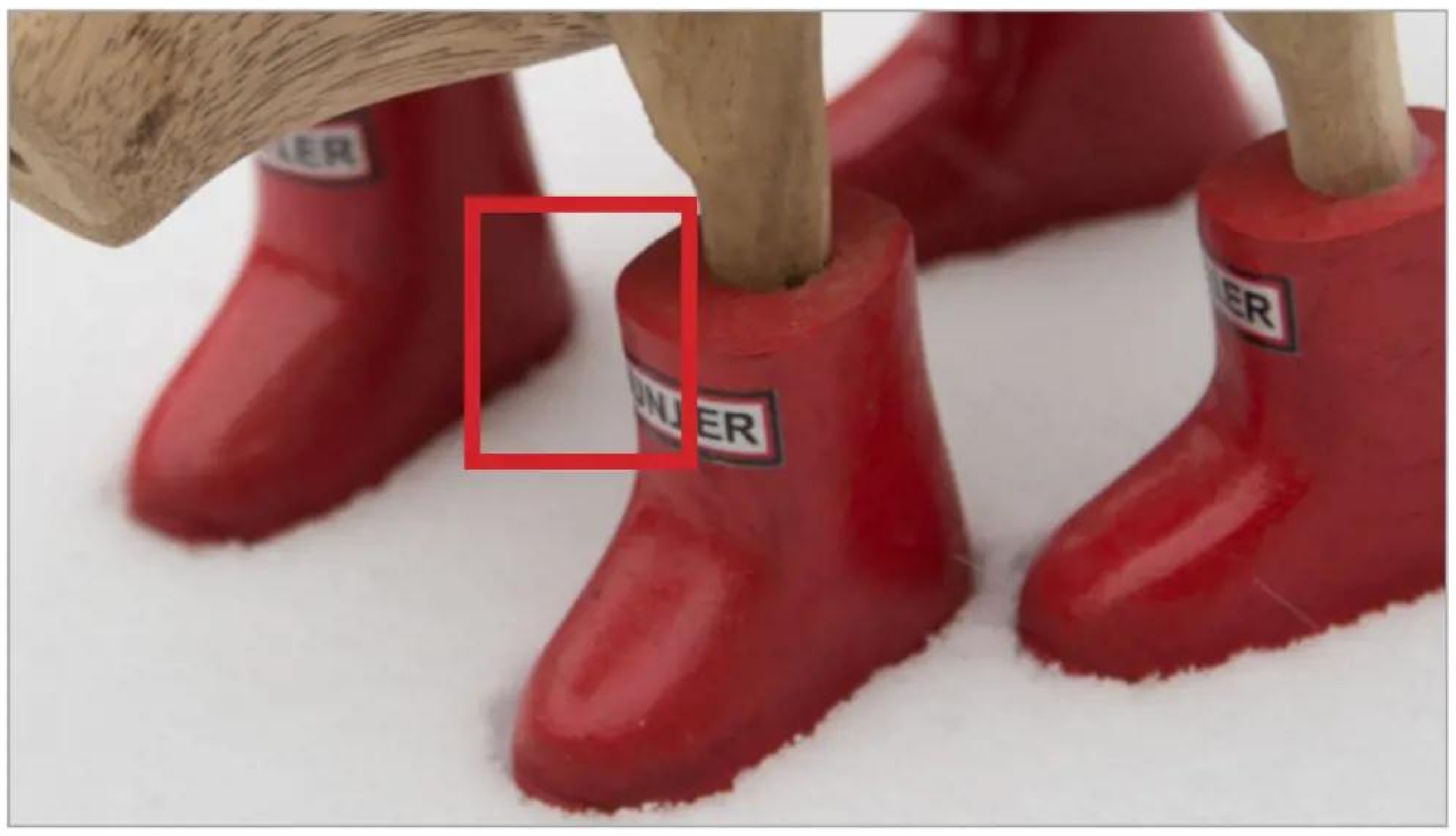
Tone Curve
HSL / Color / B & W
Split Toning

4 The Daylight preset is looking better, with the colour temperature set to 5500K and a tint of +10. The whites look a bit brighter and the snow looks a little more neutral with less of the magenta tint. The day was overcast, so we can warm the picture up by using the Cloudy preset.

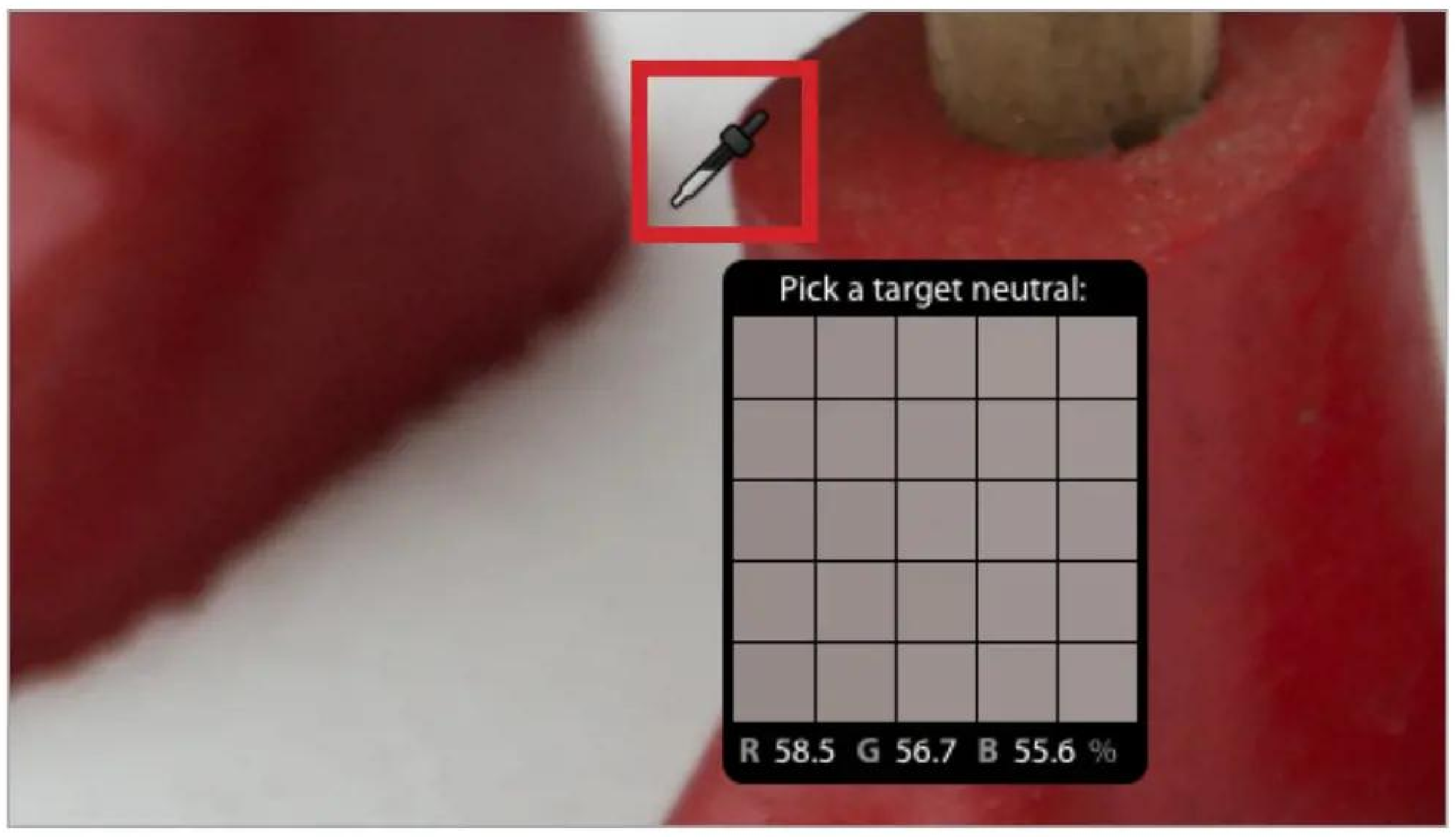


Treatment: Color | Black & White
WB: Cloudy
Temp 6,500
Tint + 10
Exposure 0.00
Contrast 0

5 There is another way to accurately set the white balance for an image other than presets or guesswork. If you look on the Basic panel, to the left of the white balance setting you'll see an icon of an eyedropper. This is the White Balance Selector tool and you can use it to measure the white balance directly from the image.

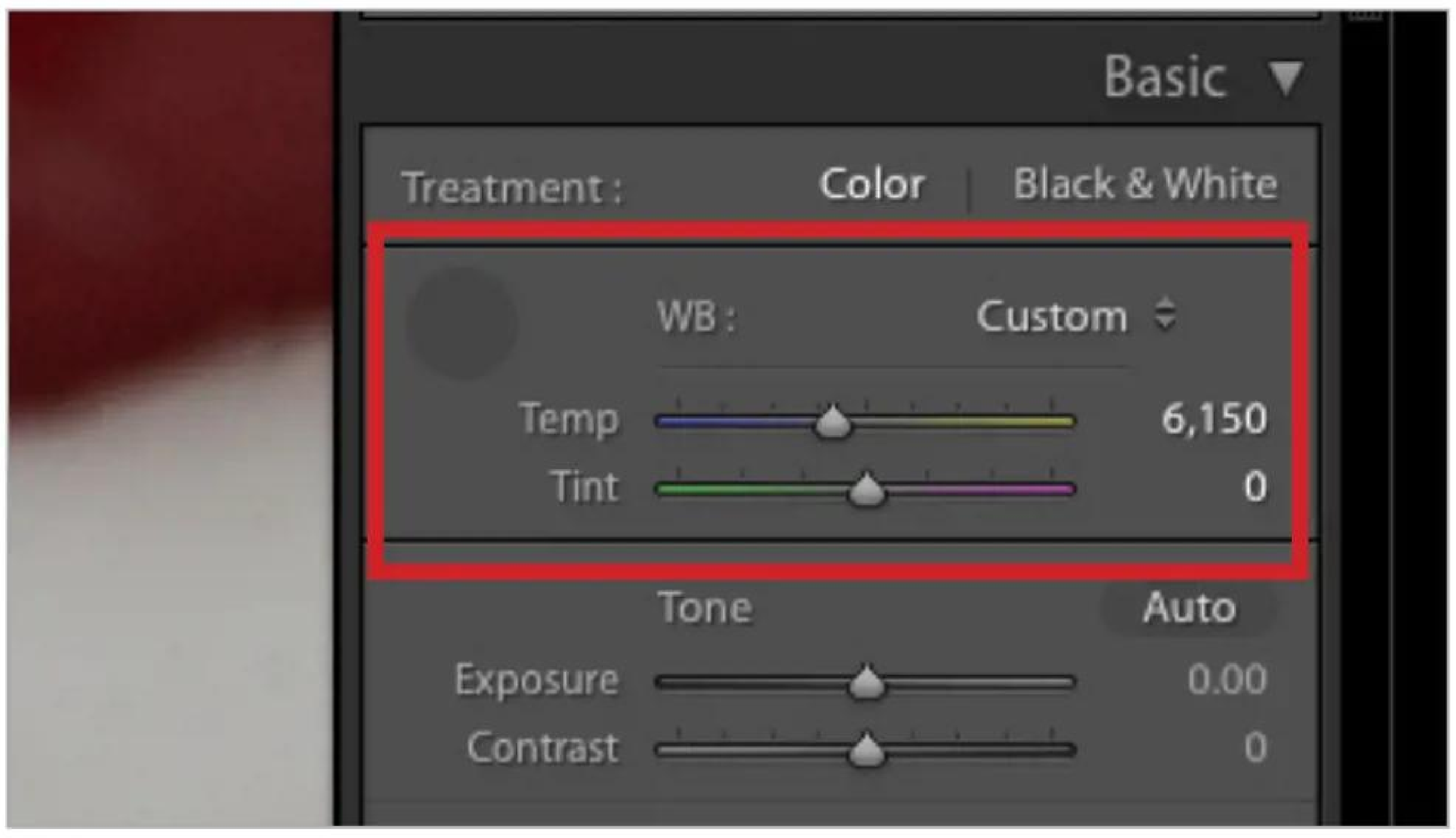


6 To use the White Balance Selector tool, click on the eyedropper icon and you'll see it become your mouse cursor. You need to find an area of the image that you know is a neutral tone; in this example, we know that the snow the wooden pig is standing on is pure white, so that will do nicely. Clouds, paper and white bird plumage are also good for this.



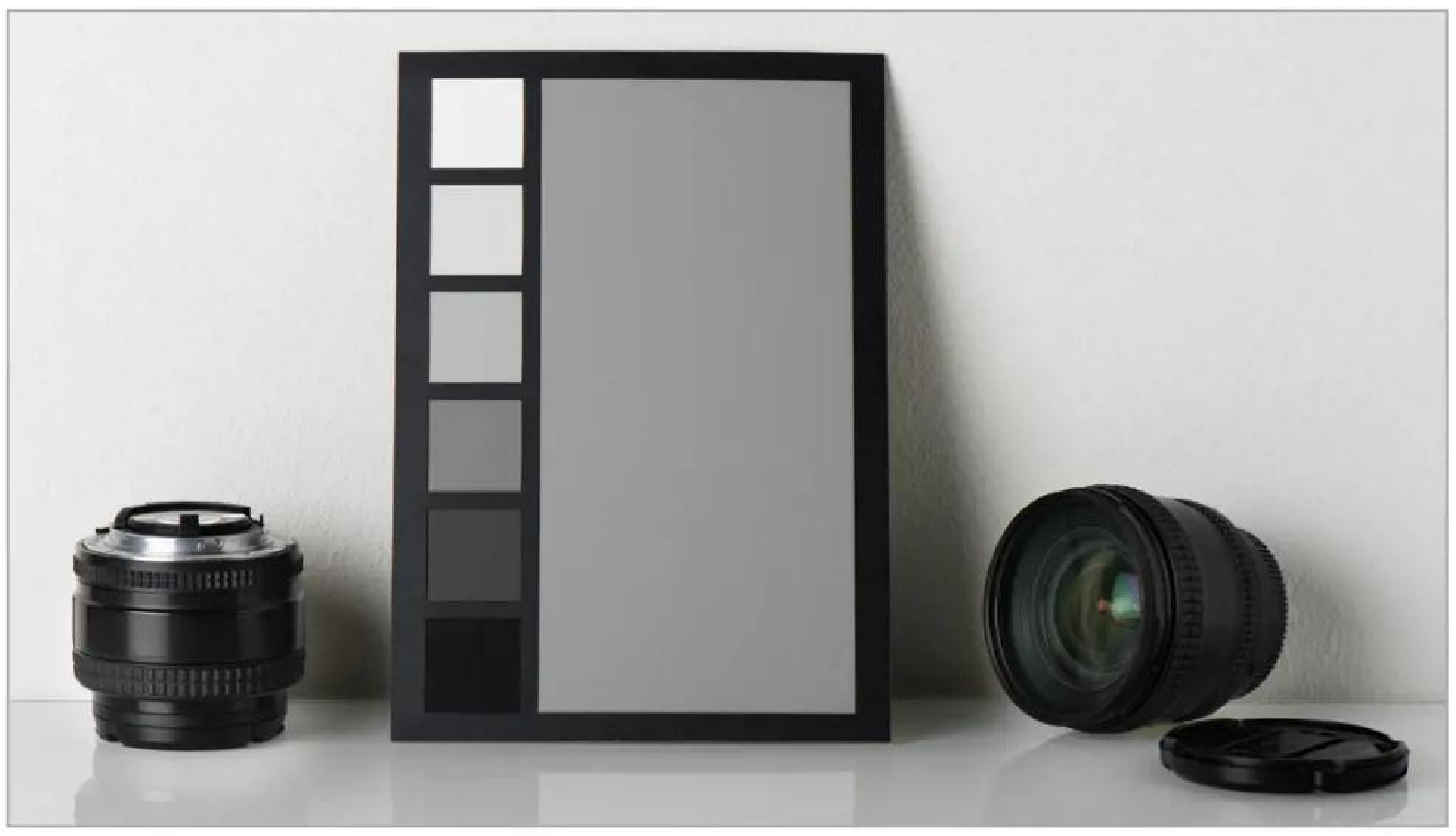
Pick a target neutral:
R 58.5 G 56.7 B 55.6 %

7 Move the eyedropper cursor over the neutral tone that you've selected. You'll see a greatly magnified view of the area around the cursor position, so you can make sure that you don't accidentally click on a dust spot or other non-neutral tone. You can see the RGB values of the selected pixel displayed at the bottom of the frame.

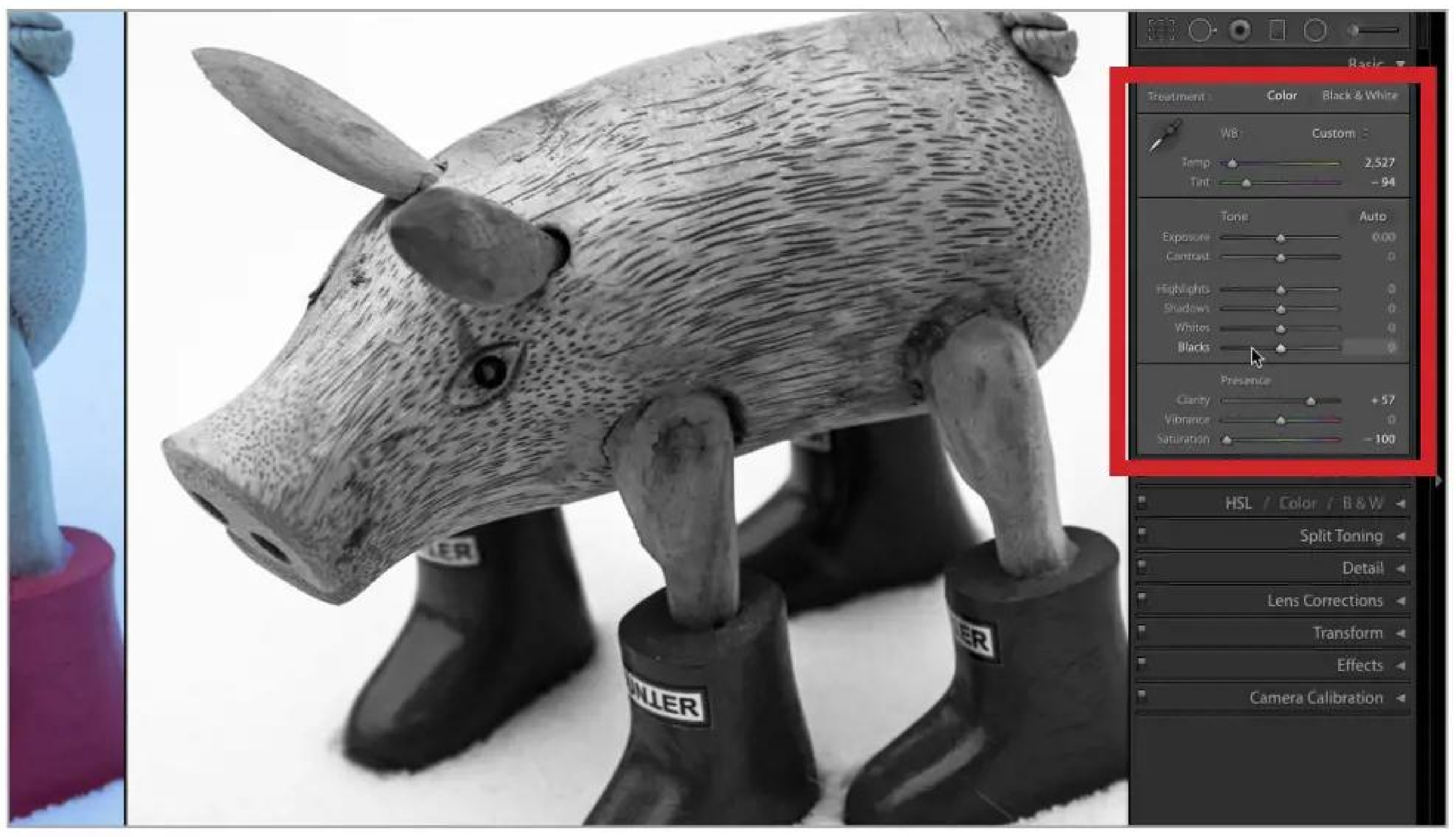


Treatment: Color | Black & White
WB: Custom
Temp 6,150
Tint 0
Exposure 0.00
Contrast 0

8 Click on the pixel that you want to sample, and you'll see that the eyedropper returns to its home, the White Balance setting changes to Custom, and the colour temperature and tint change to a new value. In this case, it's a colour temperature of 6150K with a 0 tint, quite different to the original Auto setting or any of the presets.



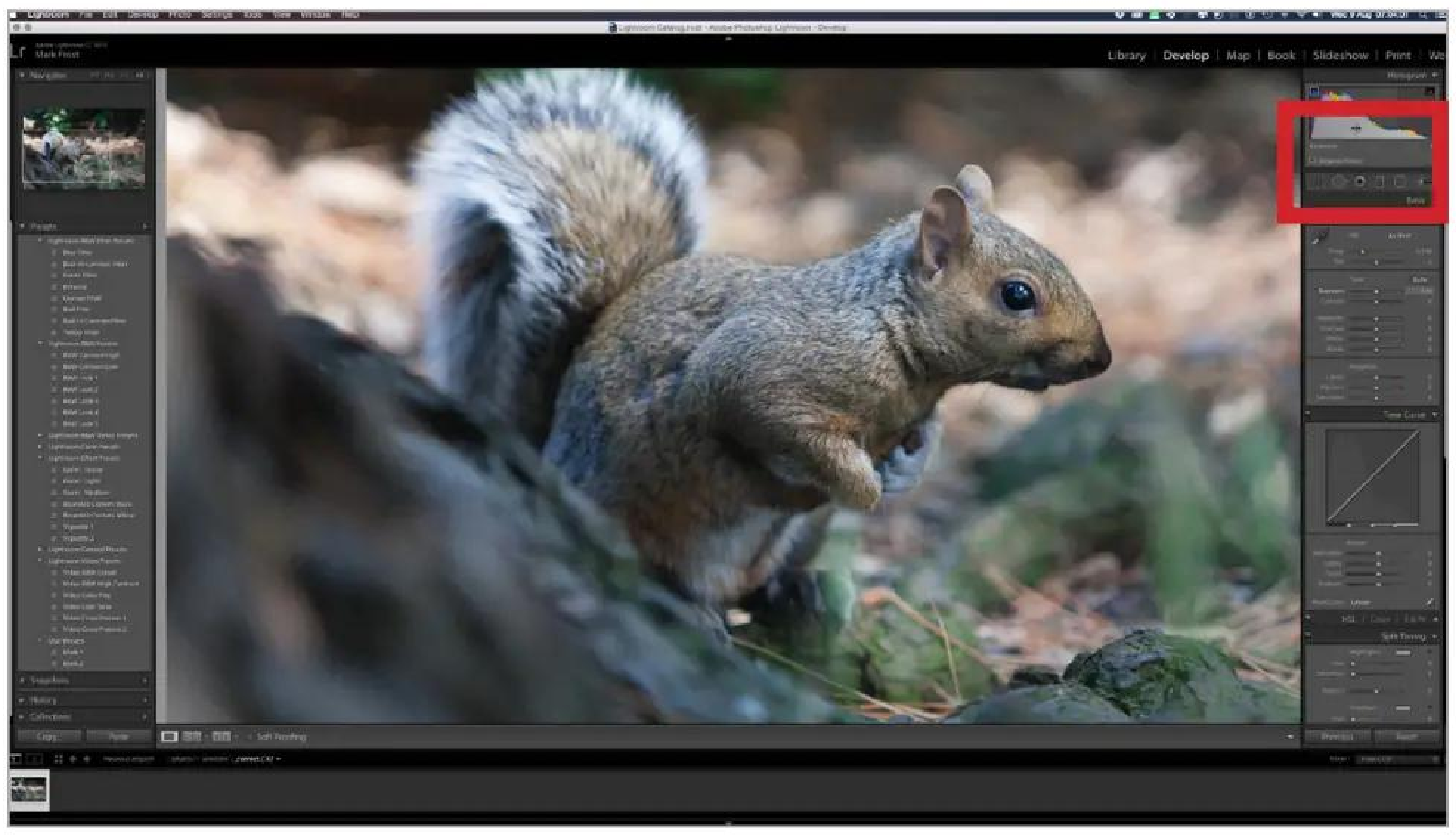
9 Of course, you might not always have a suitably neutral-toned object in the frame, which is one reason why most professional photographers carry something called a 'grey card', literally a sheet of card coloured a neutral mid-tone grey, called '18% grey', that can be placed in a test shot. It is also useful for accurate manual exposure metering.



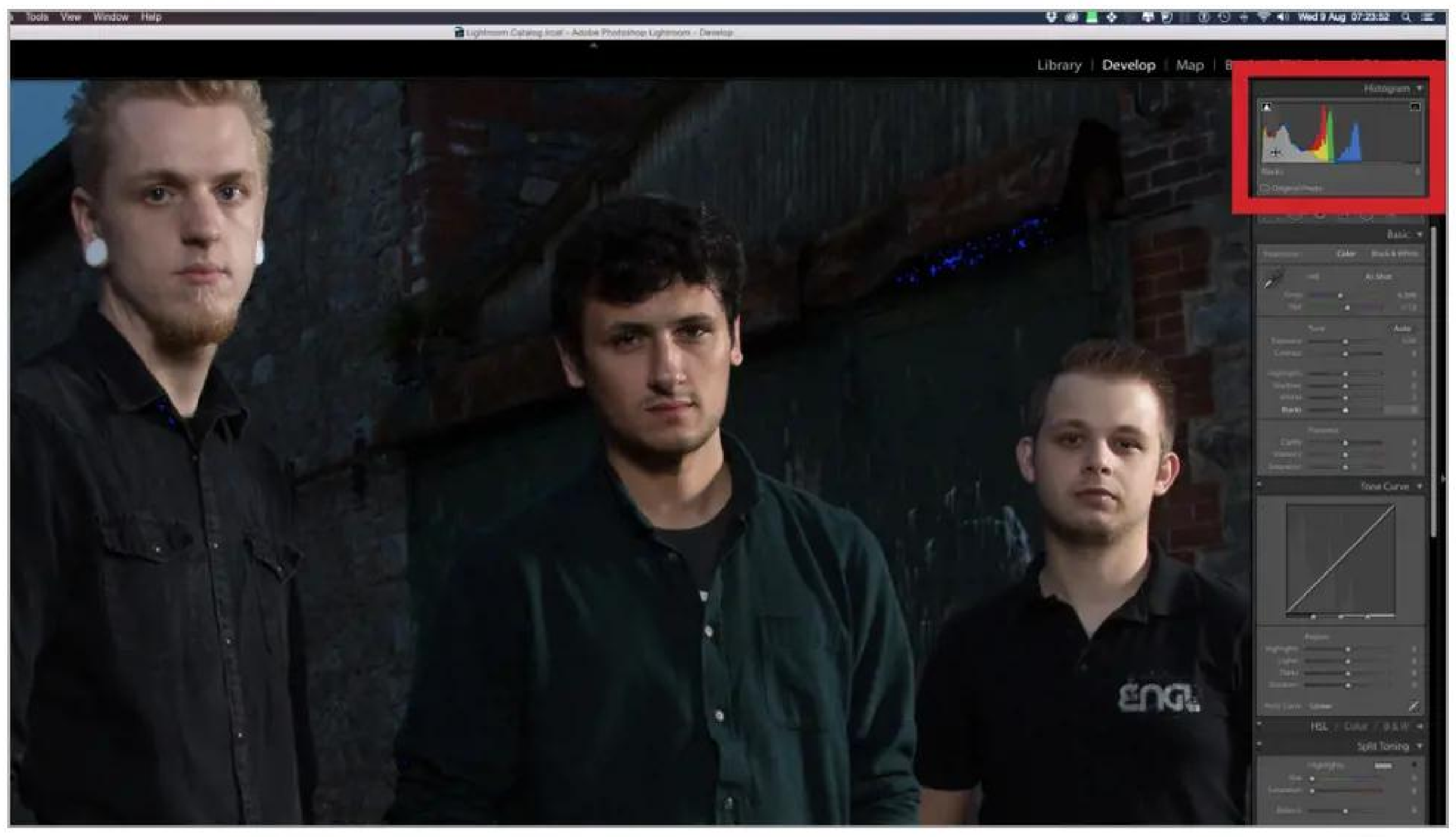
10 It's also worth noting that the white balance and tint controls can also be used in the Basic panel's Black & White mode, where they can be used as a filter to enhance the contrast of certain tones, rather like using coloured filters when shooting in black and white. Effects will vary from image to image, so it's worth experimenting.

Optimising Photos with the Histogram

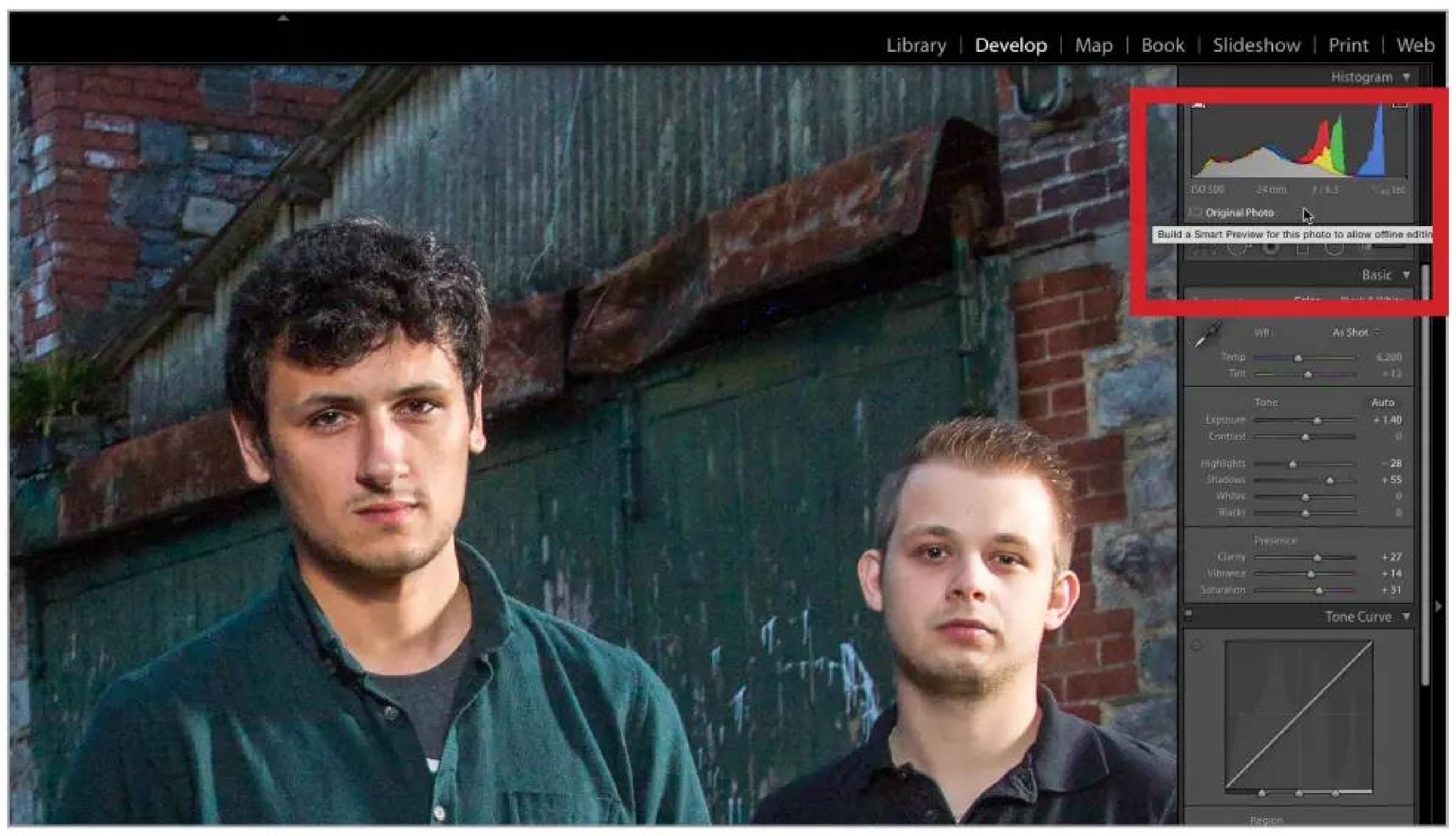
Along with focus and composition, correct exposure is one of the keystones of successful photography. With the extra exposure latitude afforded by shooting in Raw mode, Lightroom lets you adjust exposure to get the best out of your photos.



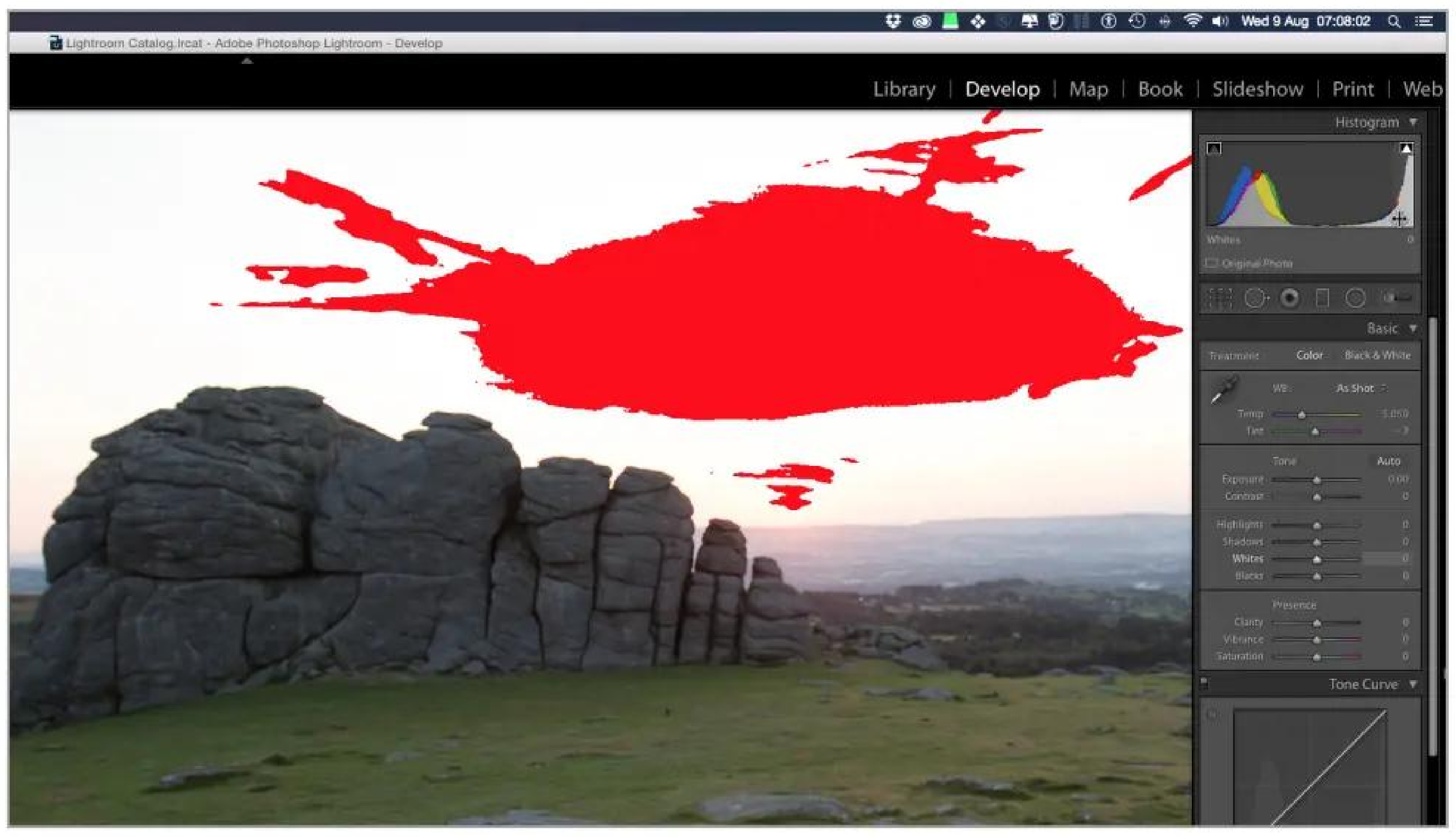
1 The Histogram is a graphical representation showing the ratio of pixels of any given brightness that are present in an image, with black on the left and white on the right. In a correctly exposed image, like this example, the distribution is spread across the graph, without being cut off at the ends and with most of the peaks in the middle.



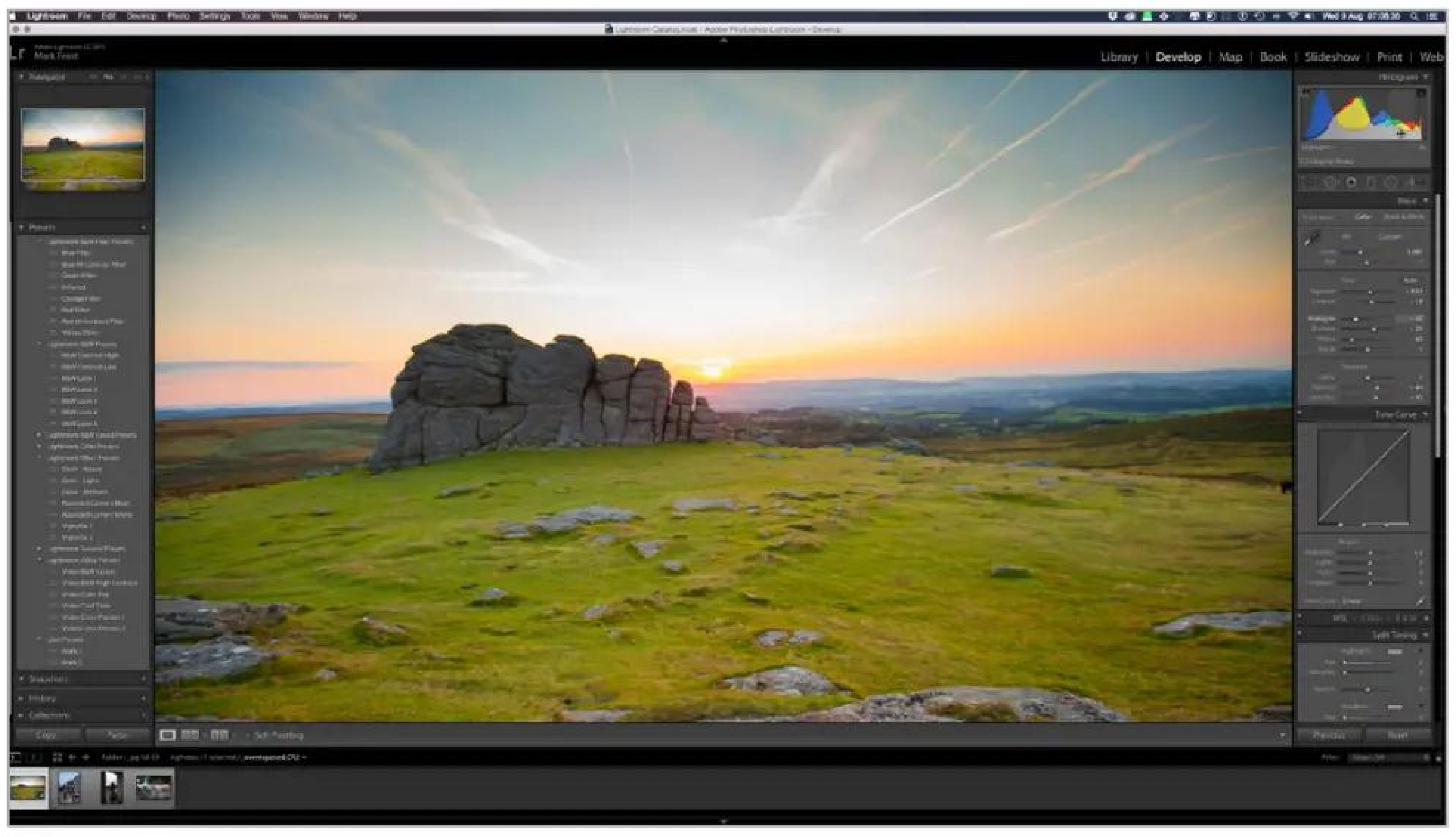
2 In an under-exposed image such as this one, you can see that the peaks of the histogram are clustered at the left-hand edge of the graph, which is the darker tones, indicating that there are more dark pixels. The curve actually runs into the edge of the graph, which is known as 'clipping'. Any clipped pixels are pure black, with no detail.



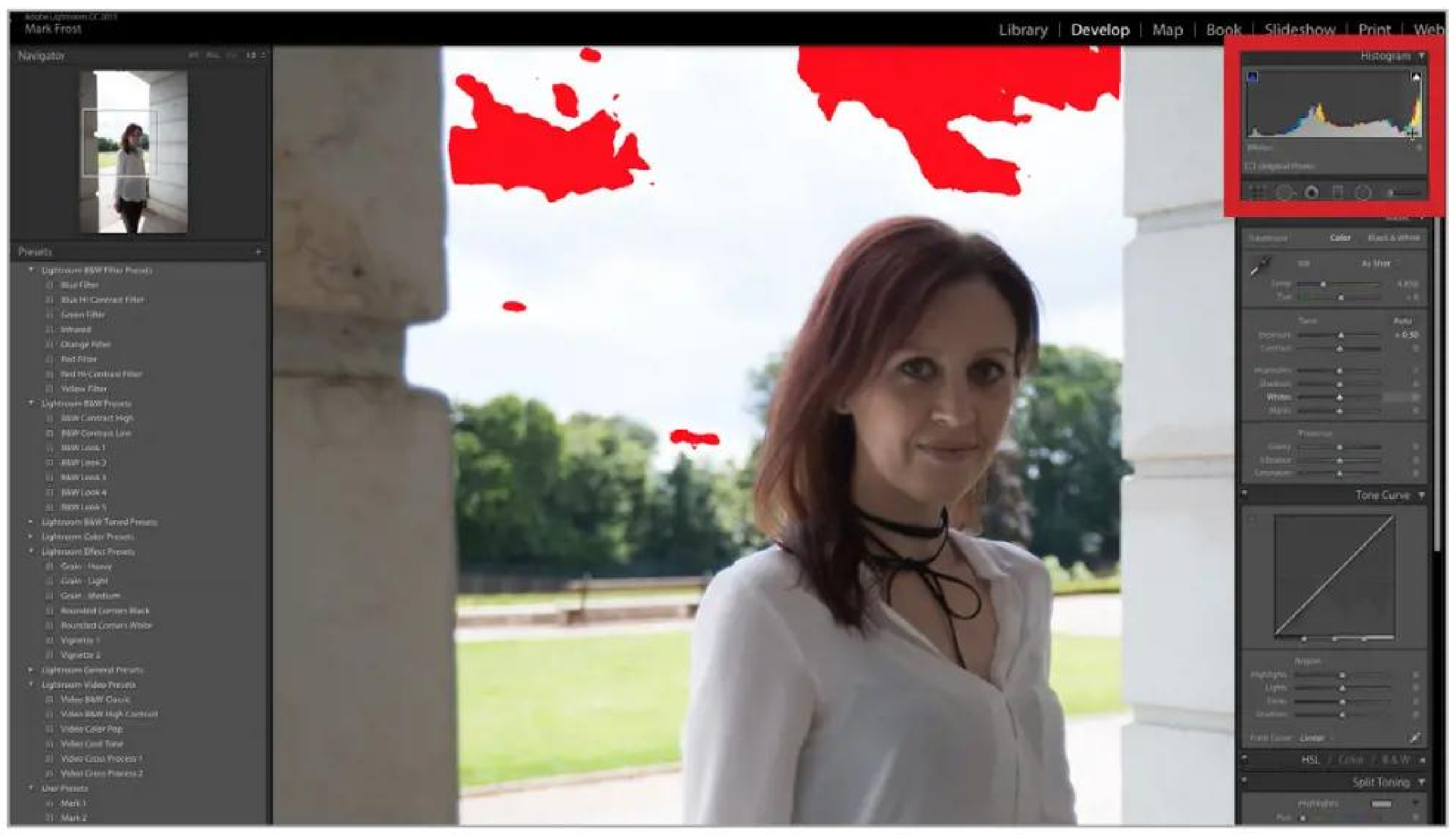
3 The histogram can show you where highlight or shadow clipping is occurring. In the top left corner of the graph you can see a small arrow. If you click on it, any clipped pixels will be highlighted in blue. Although under-exposure can be a creative option, exposure correction can be applied to pull back some detail if desired.



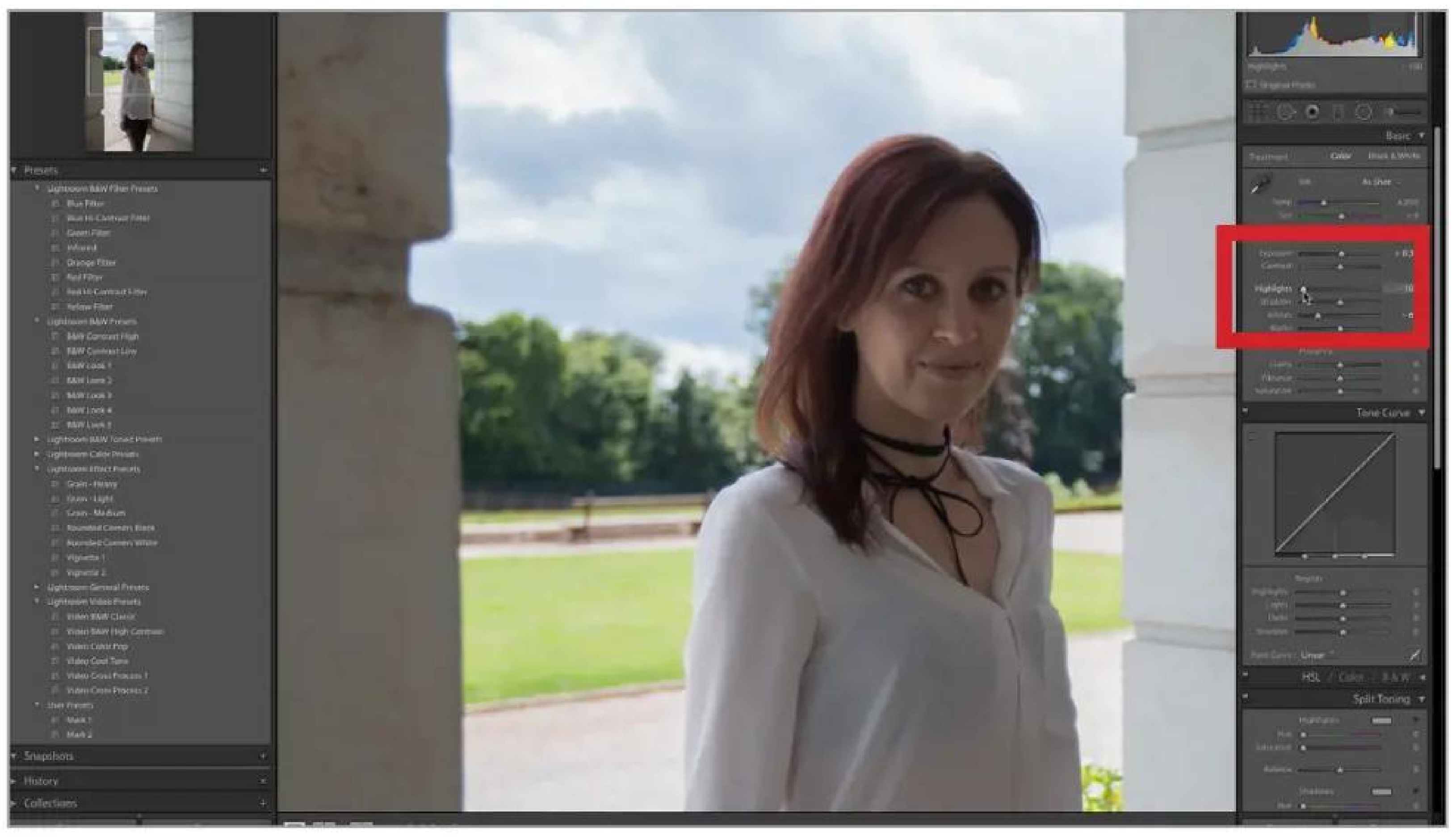
4 Similarly, in this slightly over-exposed image you can see that the tone peaks are pushed up towards the right and the highlights are clipping to pure white, as shown by the fact that there is a peak right on the edge of the graph. In this case the over-exposure is not deliberate but shooting in Raw mode allows some latitude for correction.



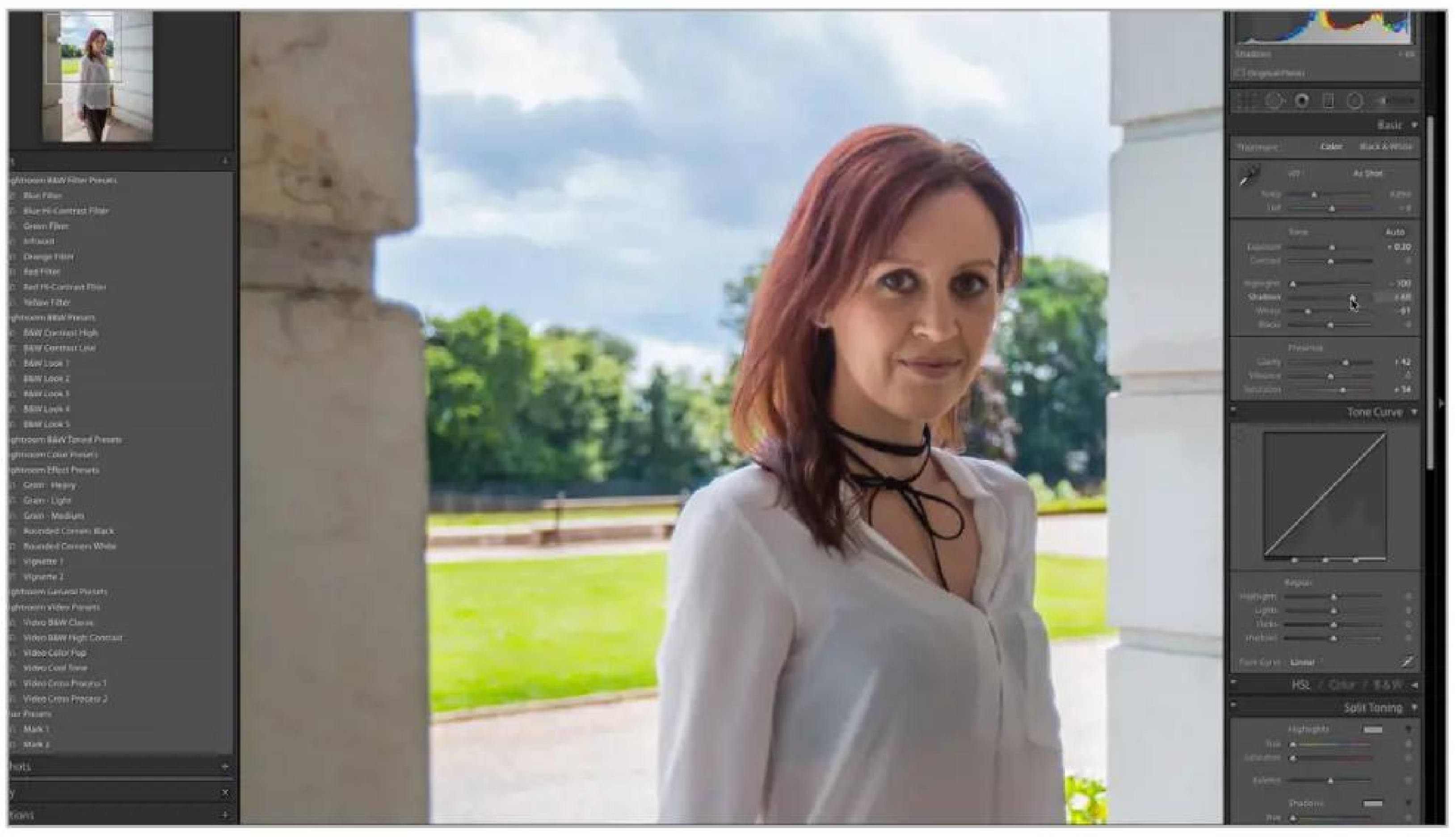
5 As with the clipped shadows, the histogram can show you the clipped highlights. Click on the arrow icon in the upper right corner of the graph and you'll see all the pure white pixels highlighted in red. We could correct this and restore the missing highlight detail by reducing the exposure or correcting the tonal balance of the image.



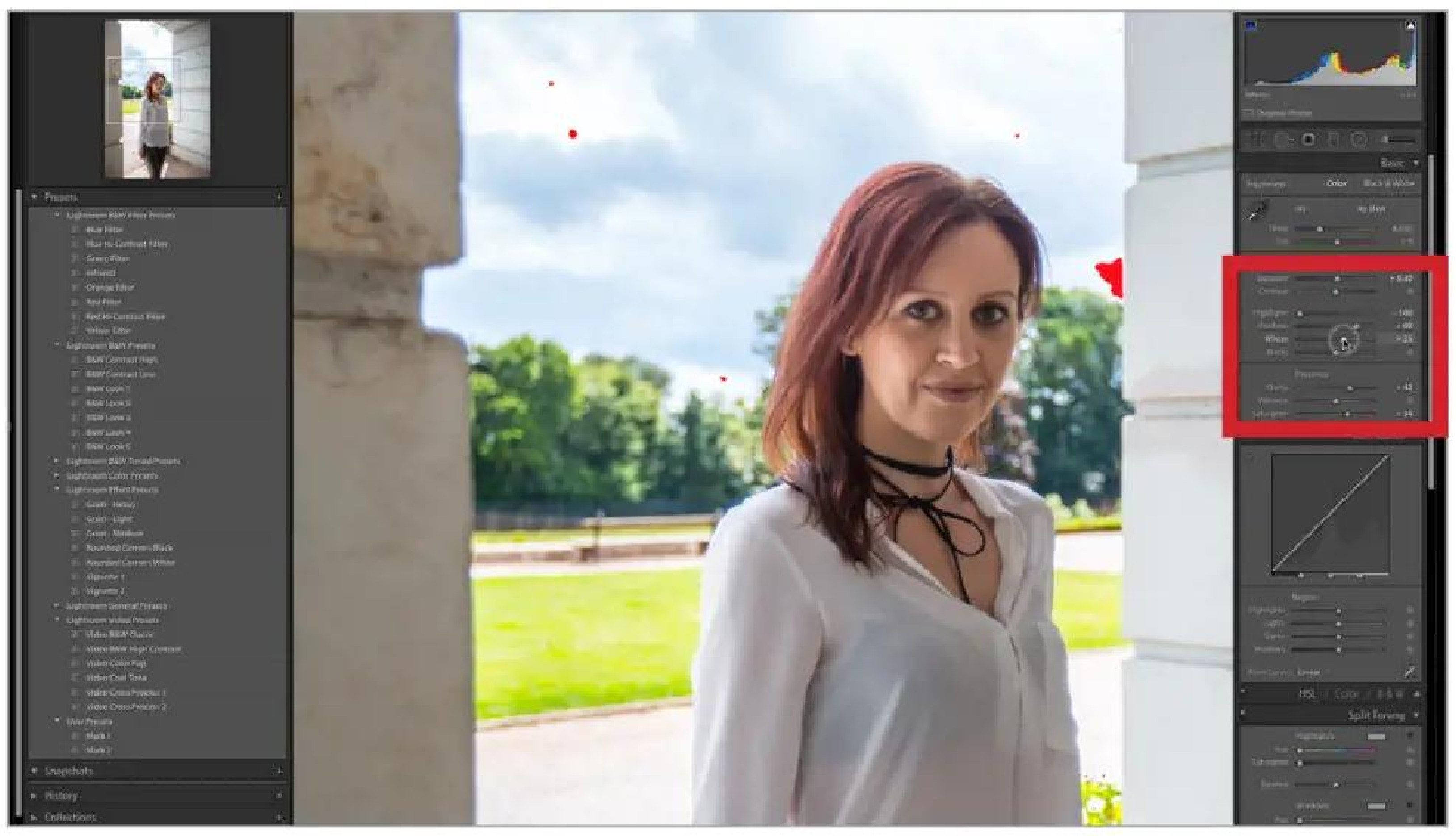
6 One of the toughest exposure challenges faced by photographers is demonstrated this typical shot of a subject with bright backlighting. It has extremes of lighting, as well as very light clothing. You can see from the histogram that there are peaks at both ends of the graph, as well as clipping of crucial highlight detail.



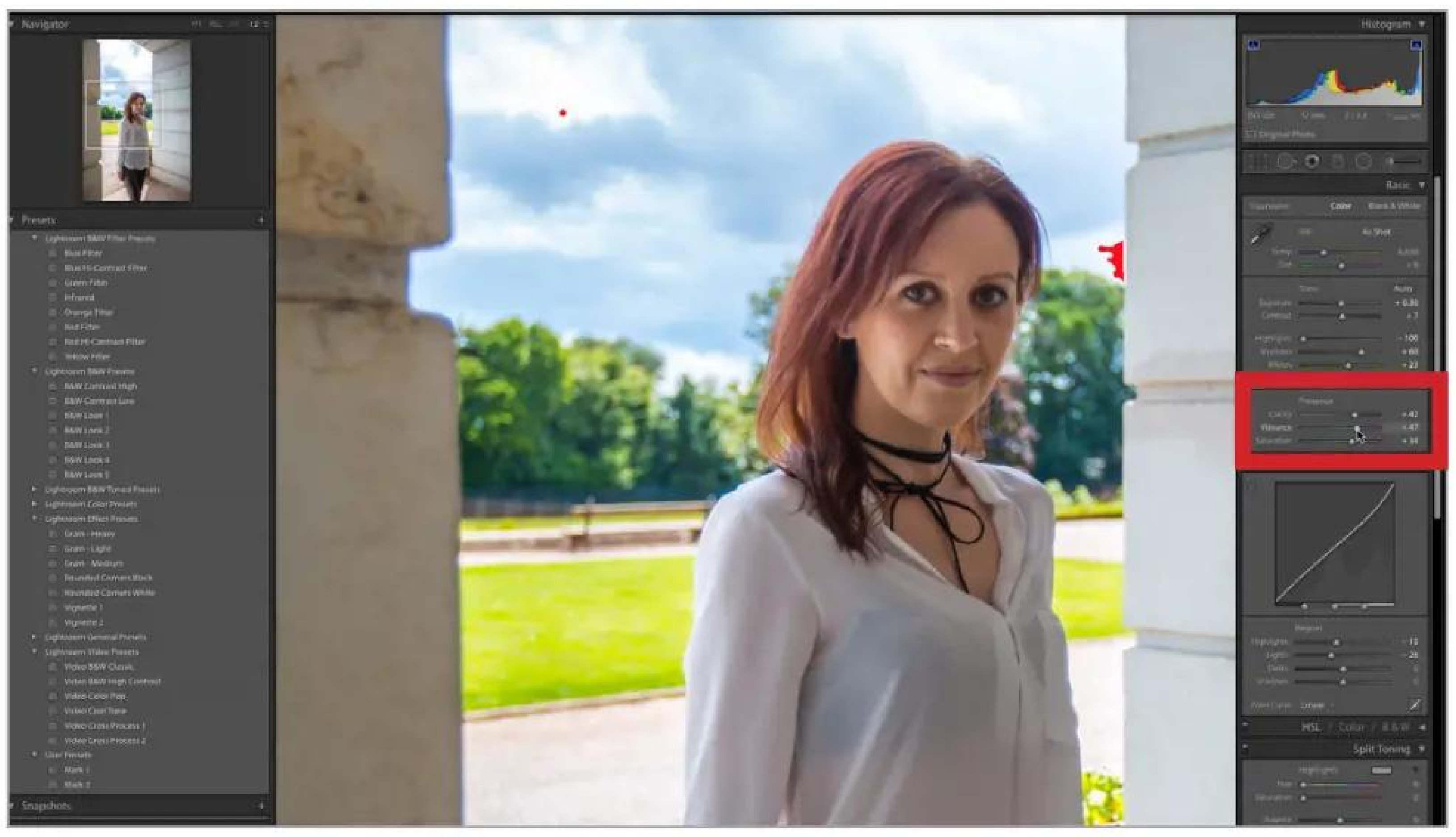
7 We can use the Tone controls in the Basic panel to correct the exposure, restore the highlight detail and generally improve the image. The first thing to do is to move the Highlights slider left, to reduce the brightness of the highlights and remove the clipping. Notice that the peak to the right of the histogram has moved to the left.



8 Next, we move the Shadows slider to the right. This lightens just the darker tones, restoring darker shadow detail including the dark foliage behind her, without affecting the highlights. You can see that the left-hand peaks of the histogram have moved to the right. Already the image is looking much better but there's still more we can do.



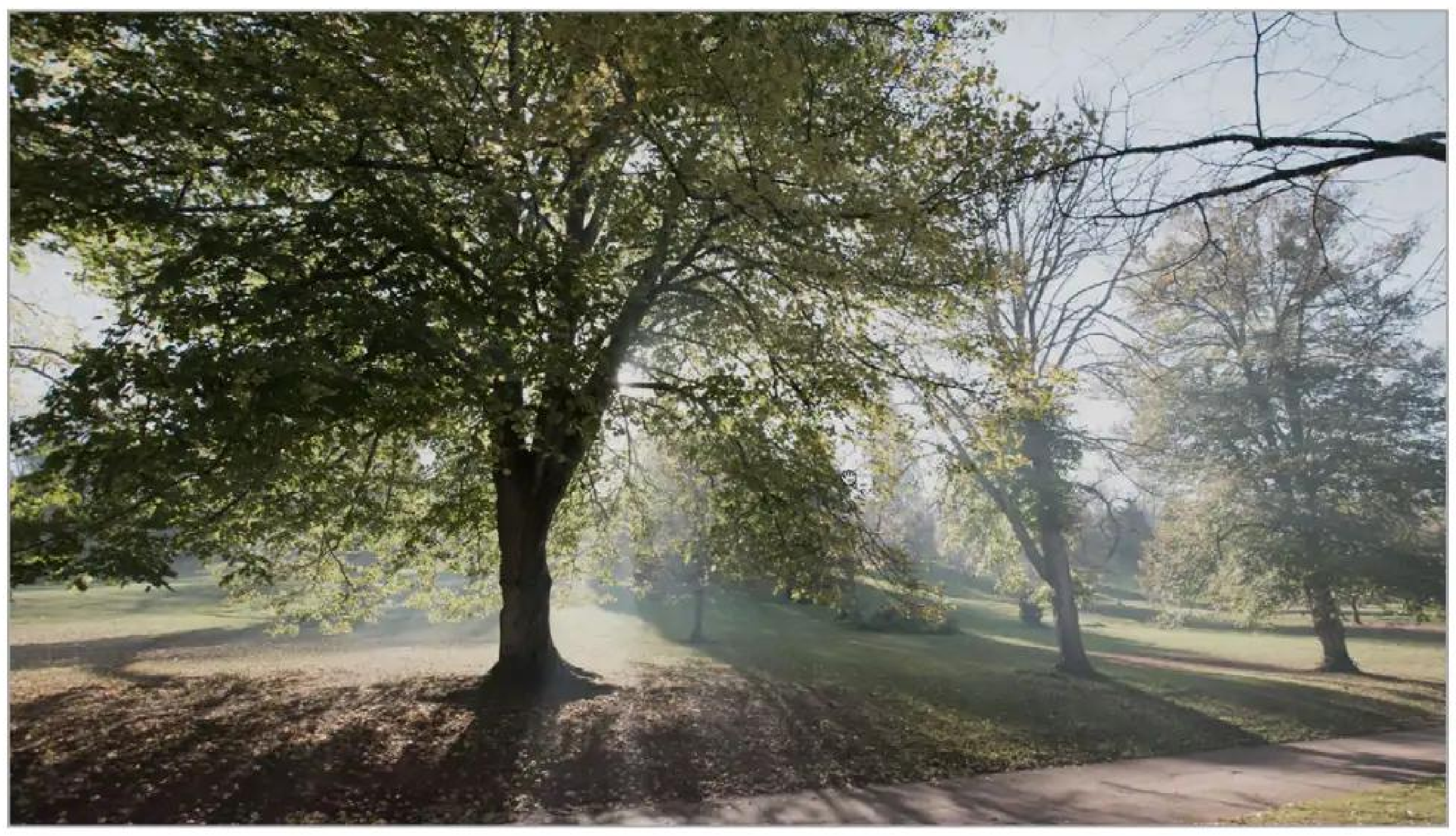
9 If we move the Whites slider a little to the right we can brighten the lighter tones only, adding a bit more punch to the detail on the white shirt. You can see the right-hand end of the histogram curve will be slightly raised as more light pixels are added. Be careful not to go too far or the highlights will start clipping again.



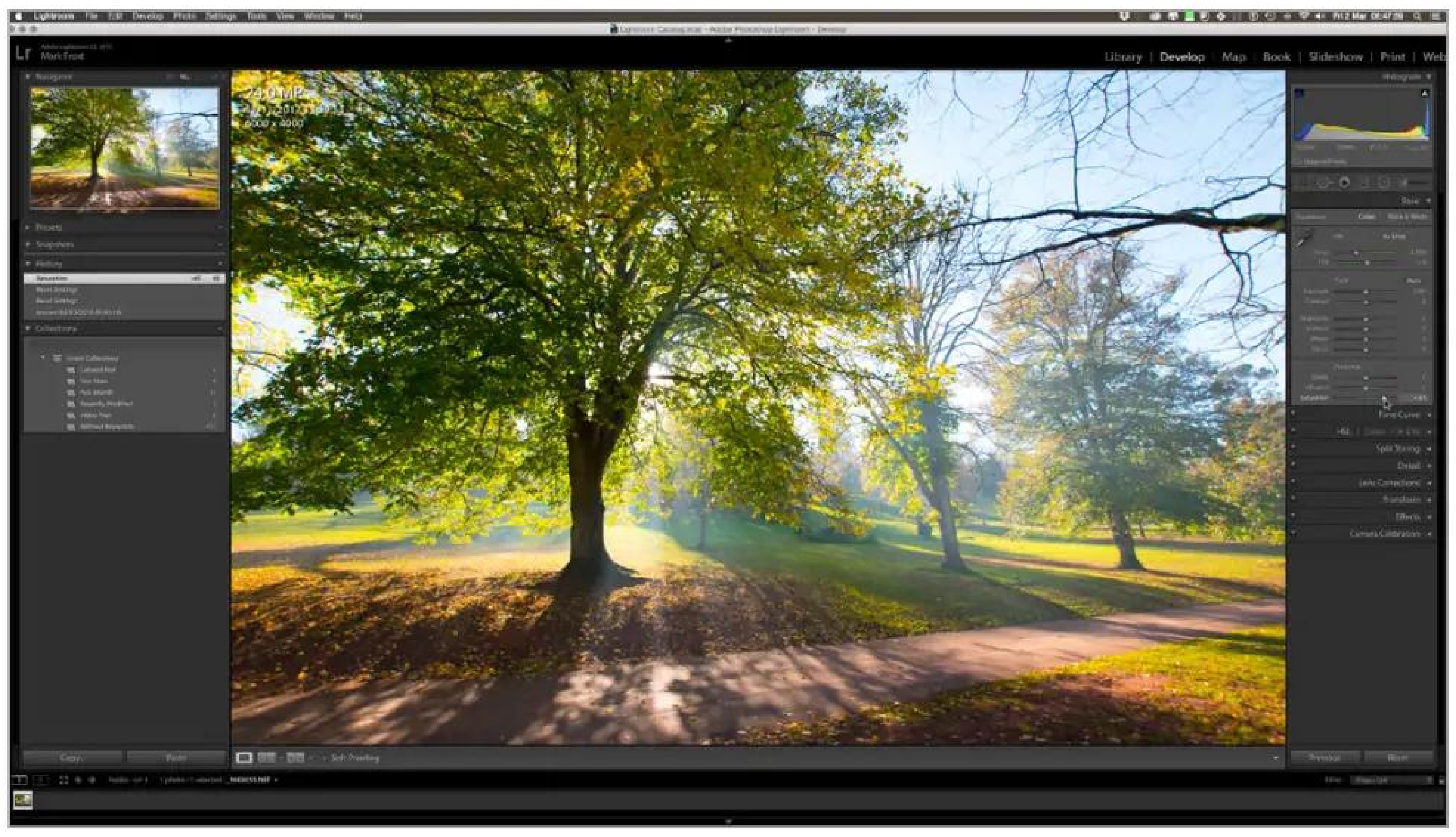
10 Finally, having restored the lost detail at both ends of the exposure curve, we can lighten the whole image by slightly increasing the exposure and then reducing the contrast slightly, which has the effect of evening out the distribution of light and dark areas. The result is a photo with a nice even histogram, indicating correct exposure.

Basic Colour Adjustments

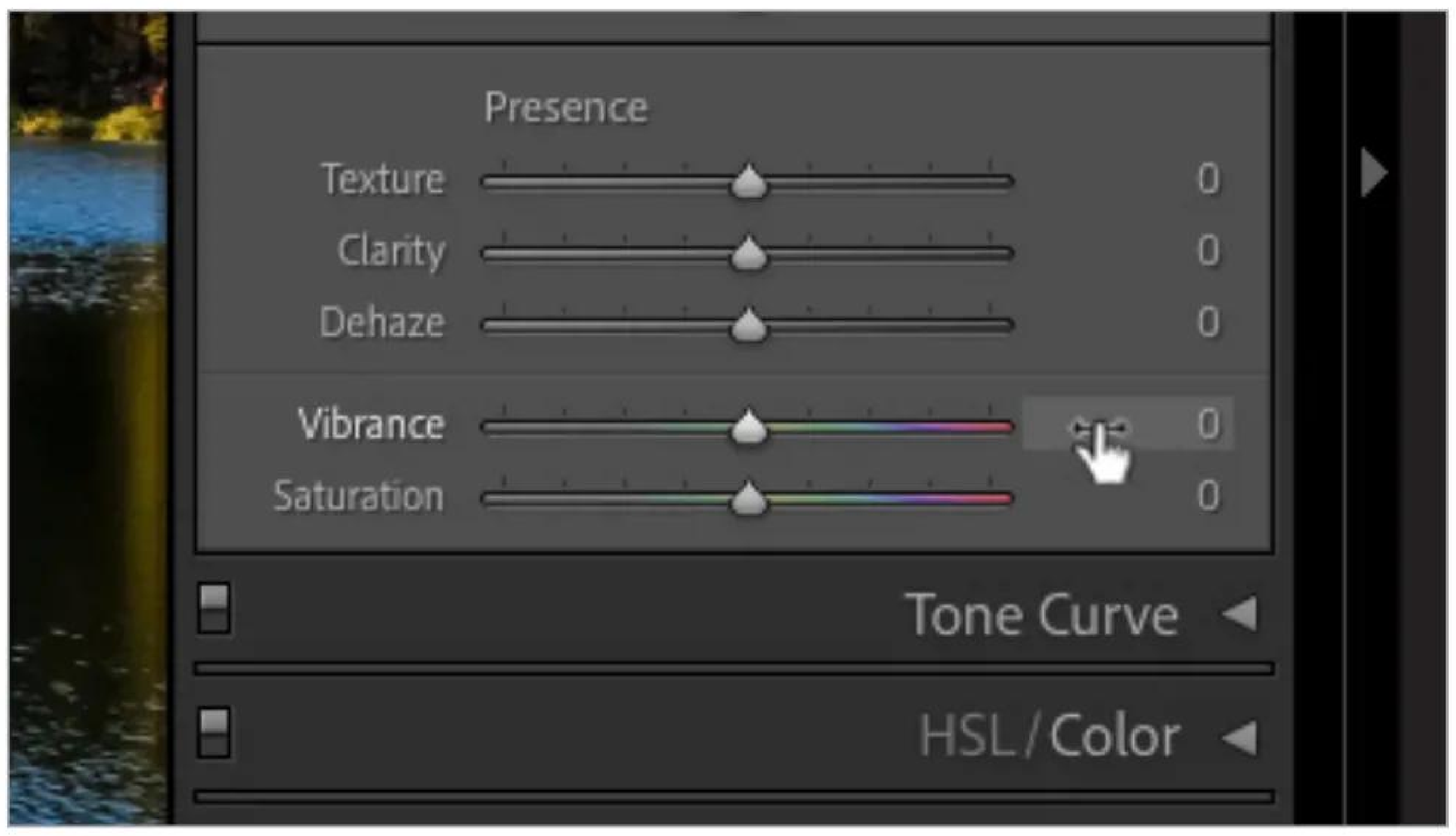
Using the Basic panel's Presence controls we can tweak and adjust the colour balance and saturation of digital photos, creating stunning scenes with life and colour. As with most image editing operations, the key to success is subtlety.



1 For our basic image, we'll use this woodland scene. It's a decent shot with good composition and a nice bright sunny glow to the light; but the colours look a little muted, it lacks punch and it doesn't really capture the full potential of what should be a striking scene. There are several things we can do to adjust the colours in this photo.

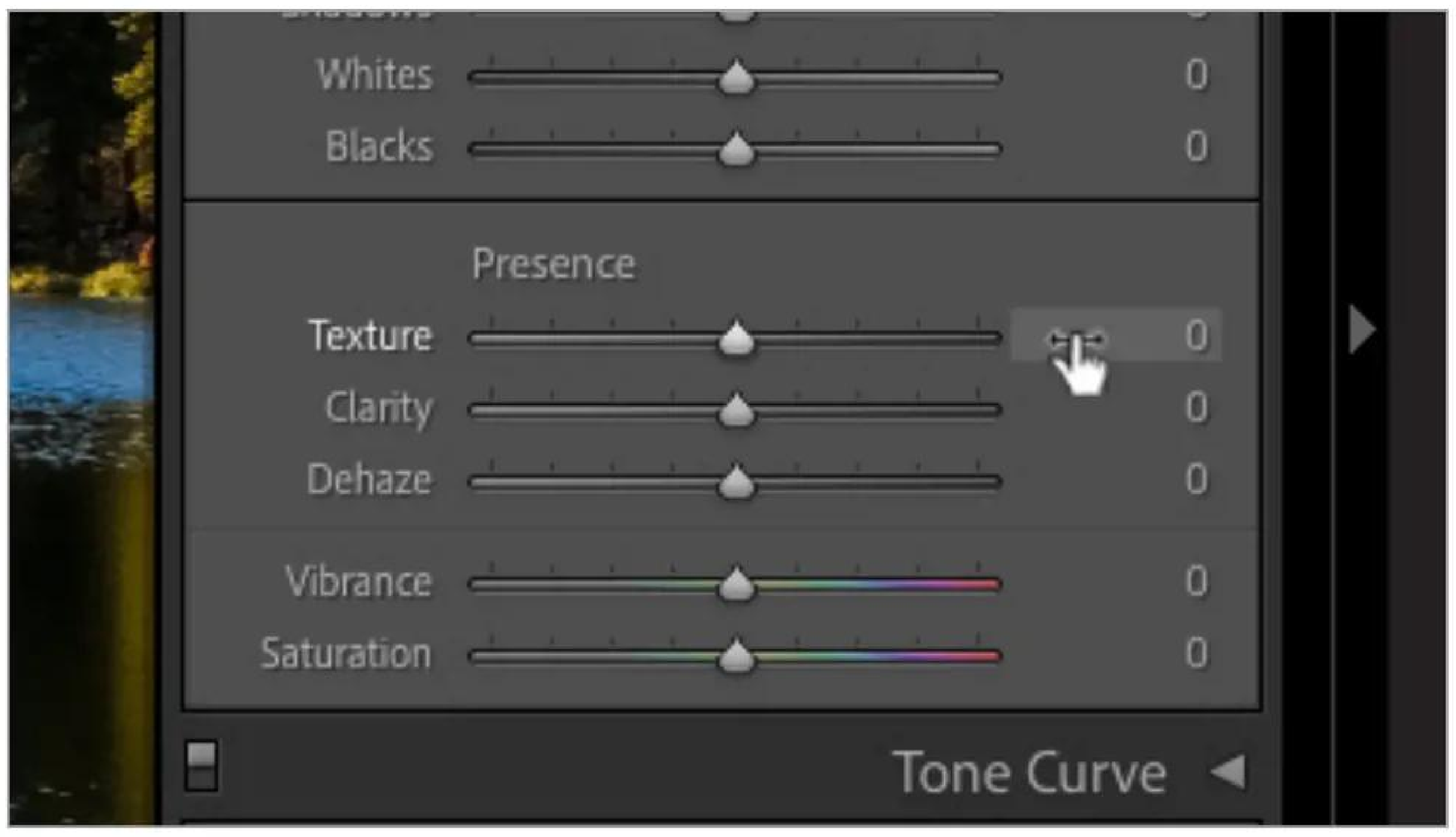


2 Simply boosting the saturation by +65 does make the colours pop but the Saturation slider is a very indiscriminate control when used on its own. The colours are certainly richer but it makes the already bright greens of the grass look too bright and unnatural. It also does nothing to help boost the contrast.



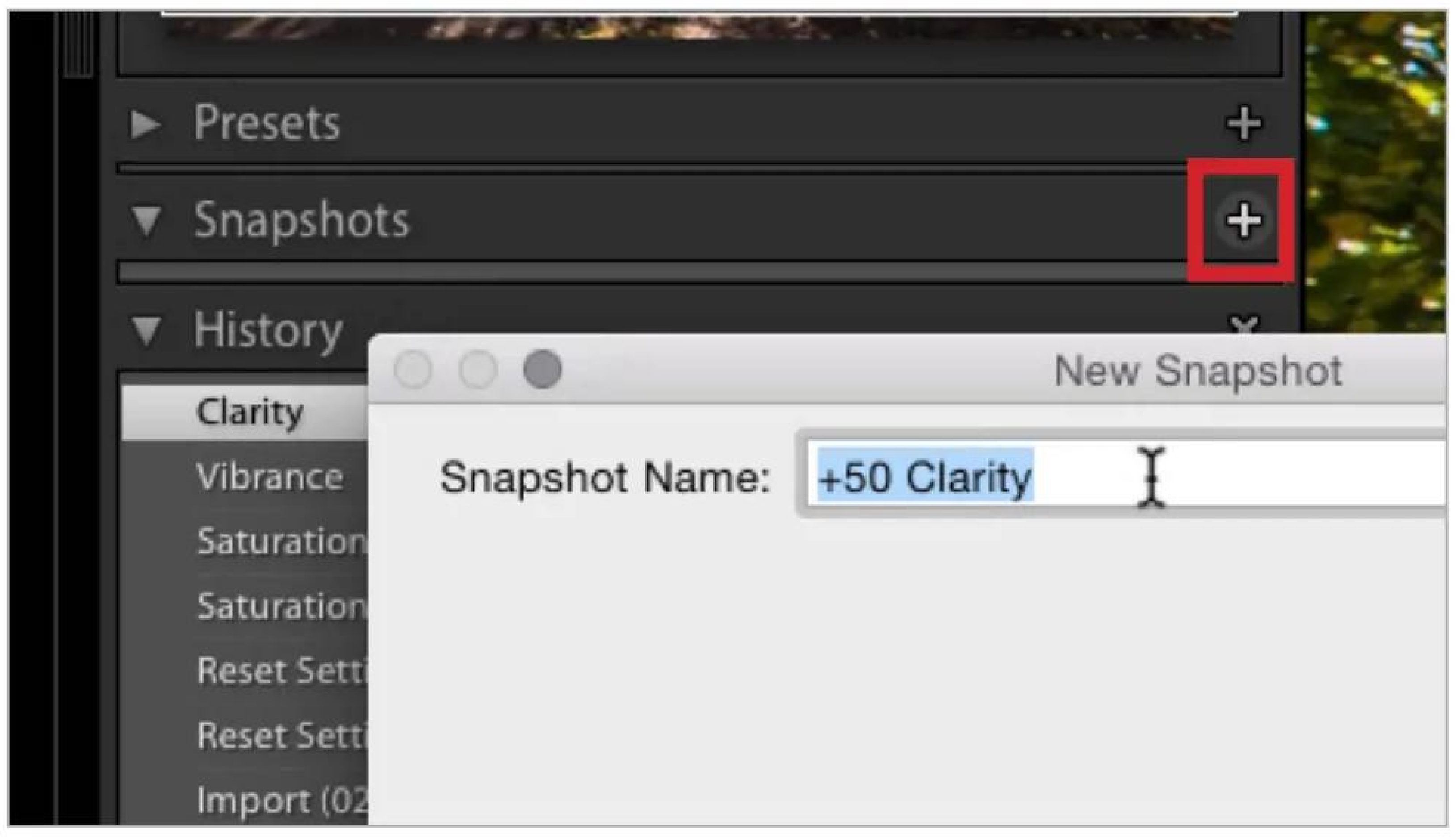
Presence
Texture 0
Clarity 0
Dehaze 0
Vibrance 0
Saturation 0

3 The Vibrance control is more subtle. Instead of boosting the saturation of every pixel, it boosts under-saturated colours more and colours already well saturated less. The result is a more colourful image but without the cartoonish over-saturation of the previous example. The grass looks more natural and the sky is more vivid.



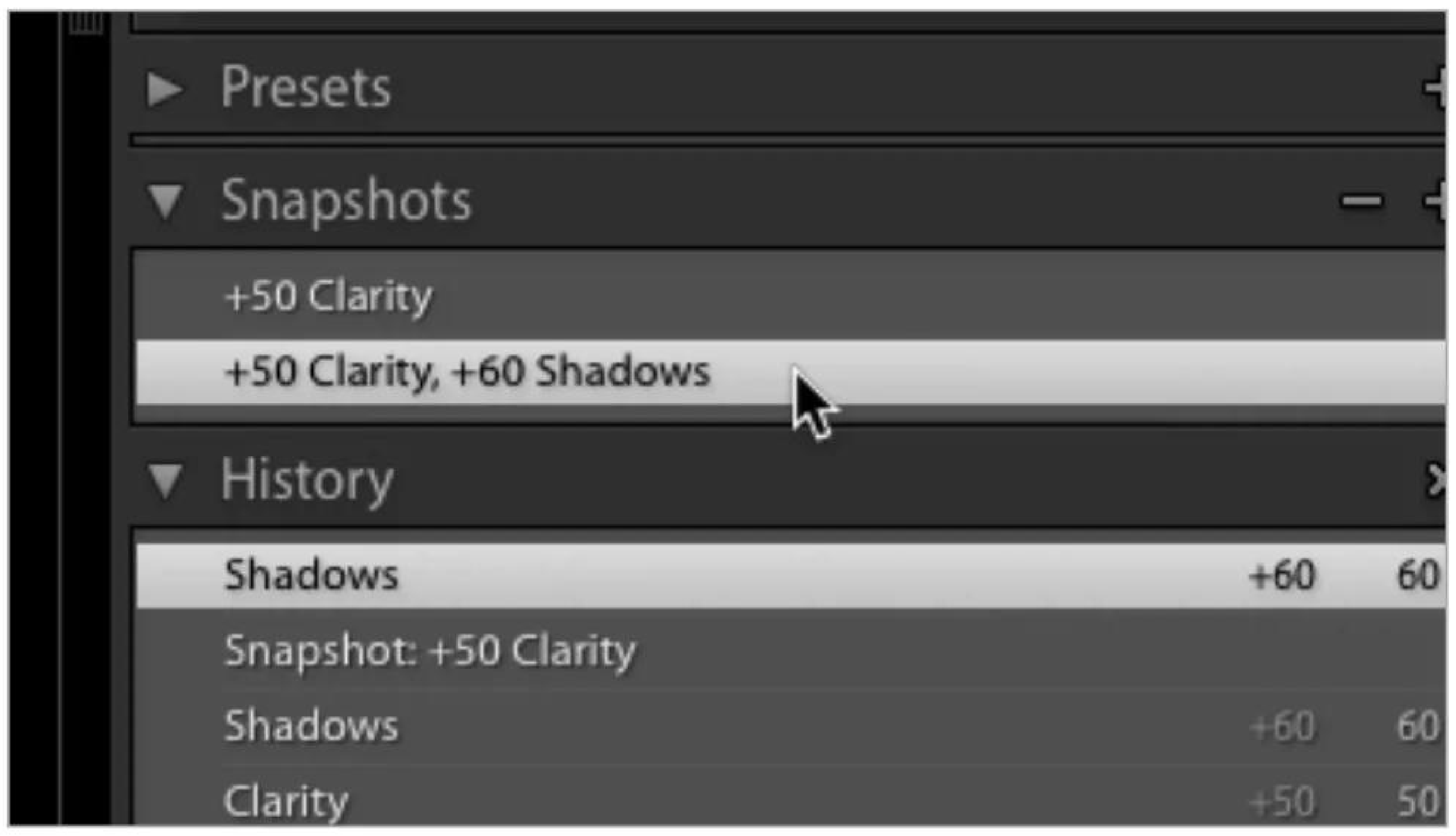
Whites 0
Blacks 0
Presence
Texture 0
Clarity 0
Dehaze 0
Vibrance 0
Saturation 0

4 The Texture, Clarity and Dehaze control doesn't affect the colour balance but it does affect the contrast of the mid-tones by increasing some of the edge detail and adding a general sharpening effect. It really helps to emphasise the contrast and texture of the trees. Clearly what we need is some sort of combination of these three effects.


Presets
Snapshots
History
Clarity
Vibrance
Saturation
Saturation
Reset Sett
Reset Sett
Import (02
New Snapshot

Snapshot Name: +50 Clarity

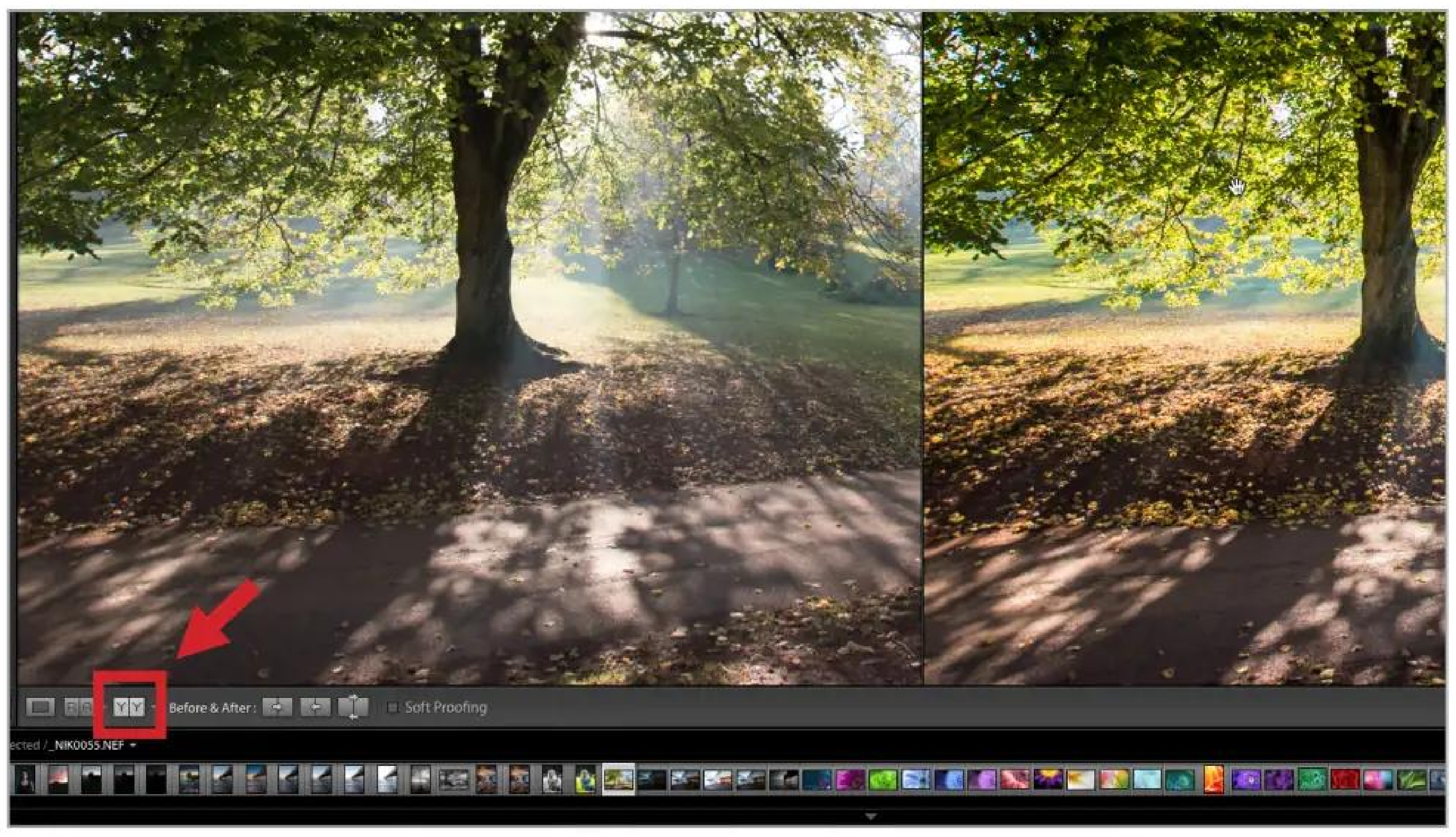
5 When making incremental adjustments like this we can make use of another Lightroom feature, the Snapshot. Make your first adjustment, in this case +50 Clarity to boost contrast, and then click on the Create Snapshot button on the left sidebar. Name the snapshot "+50 Clarity", and then click on Create. The snapshot is now saved.


Presets
Snapshots
History

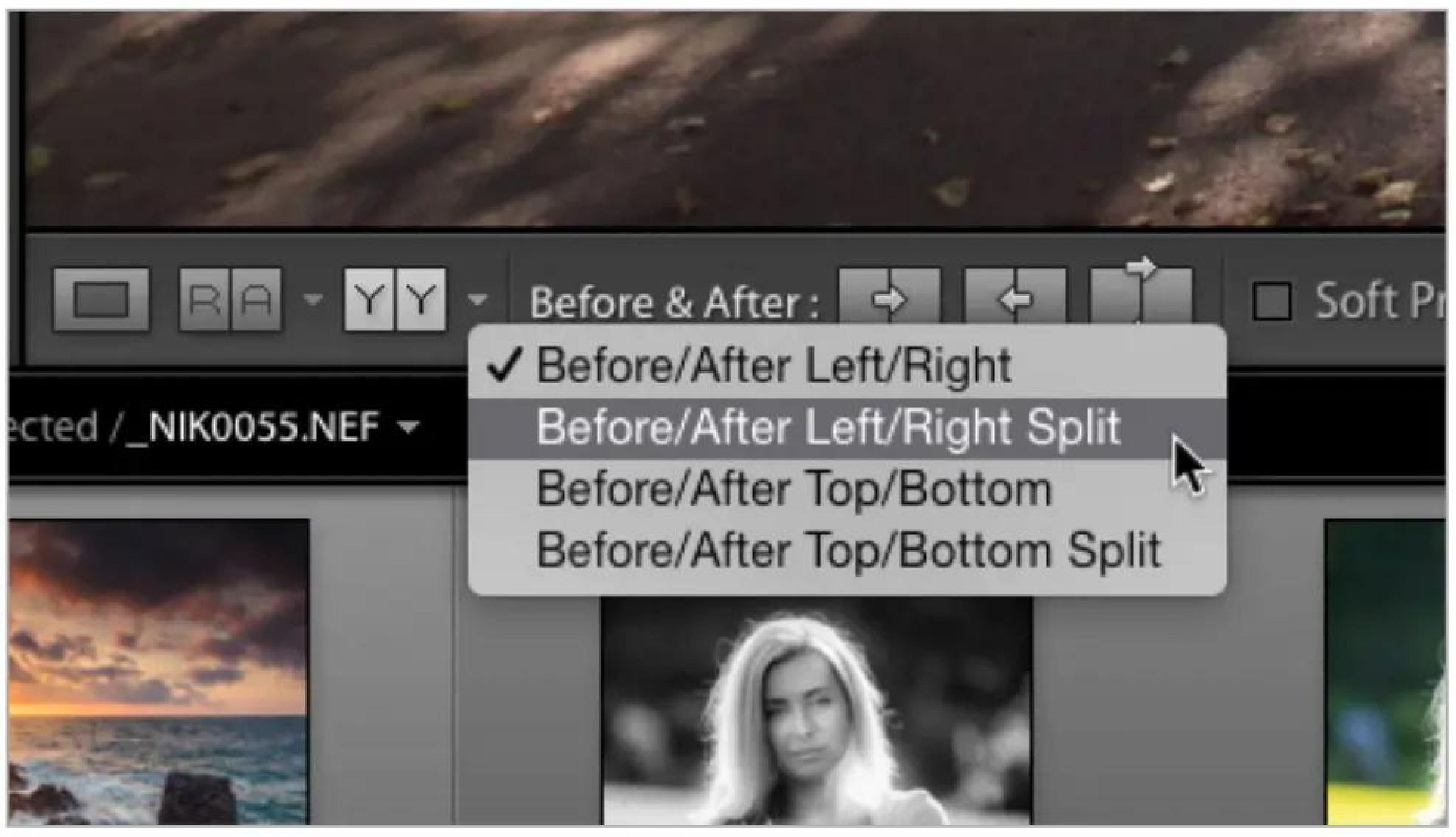
+50 Clarity
+50 Clarity, +60 Shadows

Shadows	+60	60
Snapshot: +50 Clarity		
Shadows	+60	60
Clarity	+50	50

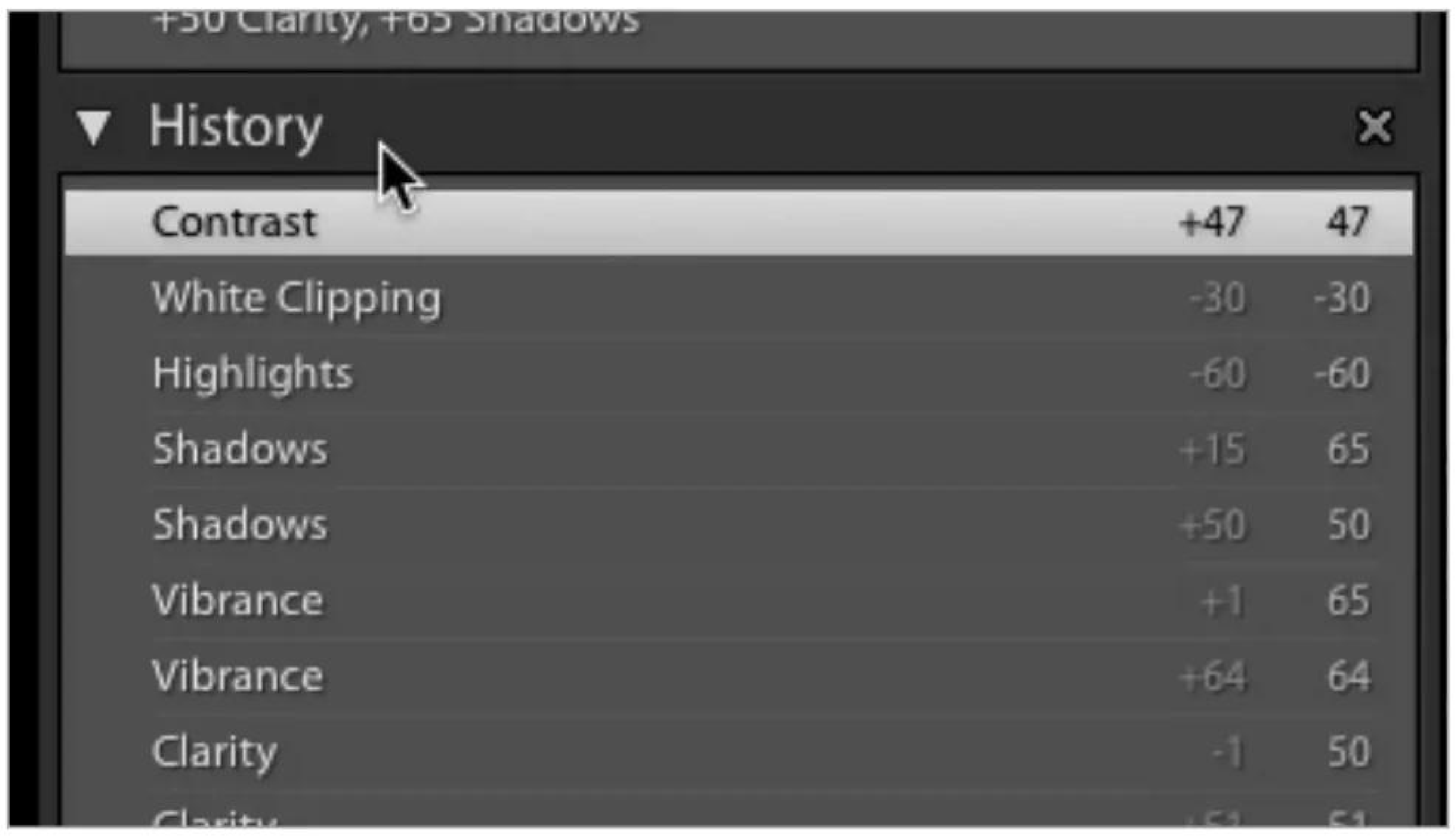
6 Make your next adjustment, then create and label a second snapshot of that state as well. You can do this as many times as you want with different adjustment combinations. You can instantly switch from one state to another by clicking on the snapshots in the left sidebar, letting you instantly compare different adjustment setups.



7 Another good way to see how your adjustments look when compared to the original unaltered shot is to use the Before & After split-screen view. In the lower left of the screen on the options bar you'll see several buttons. Click on the right one, labelled Y Y and both the edited and unedited images will appear side-by-side.

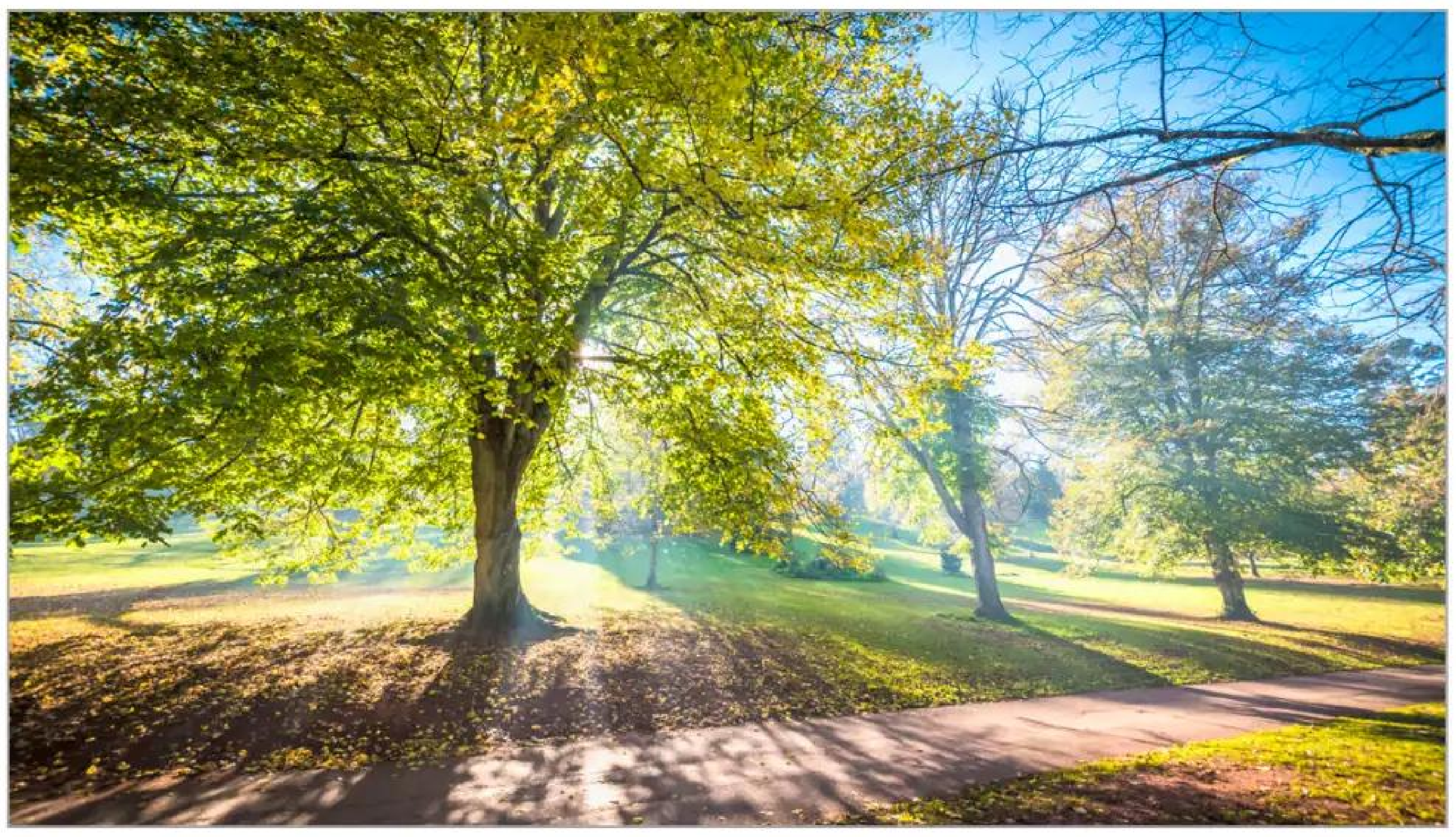

Before & After :
Soft Pr
ected /_NIK0055.NEF
✓ Before/After Left/Right
Before/After Left/Right Split
Before/After Top/Bottom
Before/After Top/Bottom Split

8 The right-hand button on the option bar provides another split-screen option; this displays the left half of the unaltered image on the left of the screen and right half of the edited version on the right of the screen. You can change positions using the pop-up menu that appears when you click the arrow next to the button.


+50 Clarity, +65 Shadows
History

Contrast	+47	47
White Clipping	-30	-30
Highlights	-60	-60
Shadows	+15	65
Shadows	+50	50
Vibrance	+1	65
Vibrance	+64	64
Clarity	-1	50

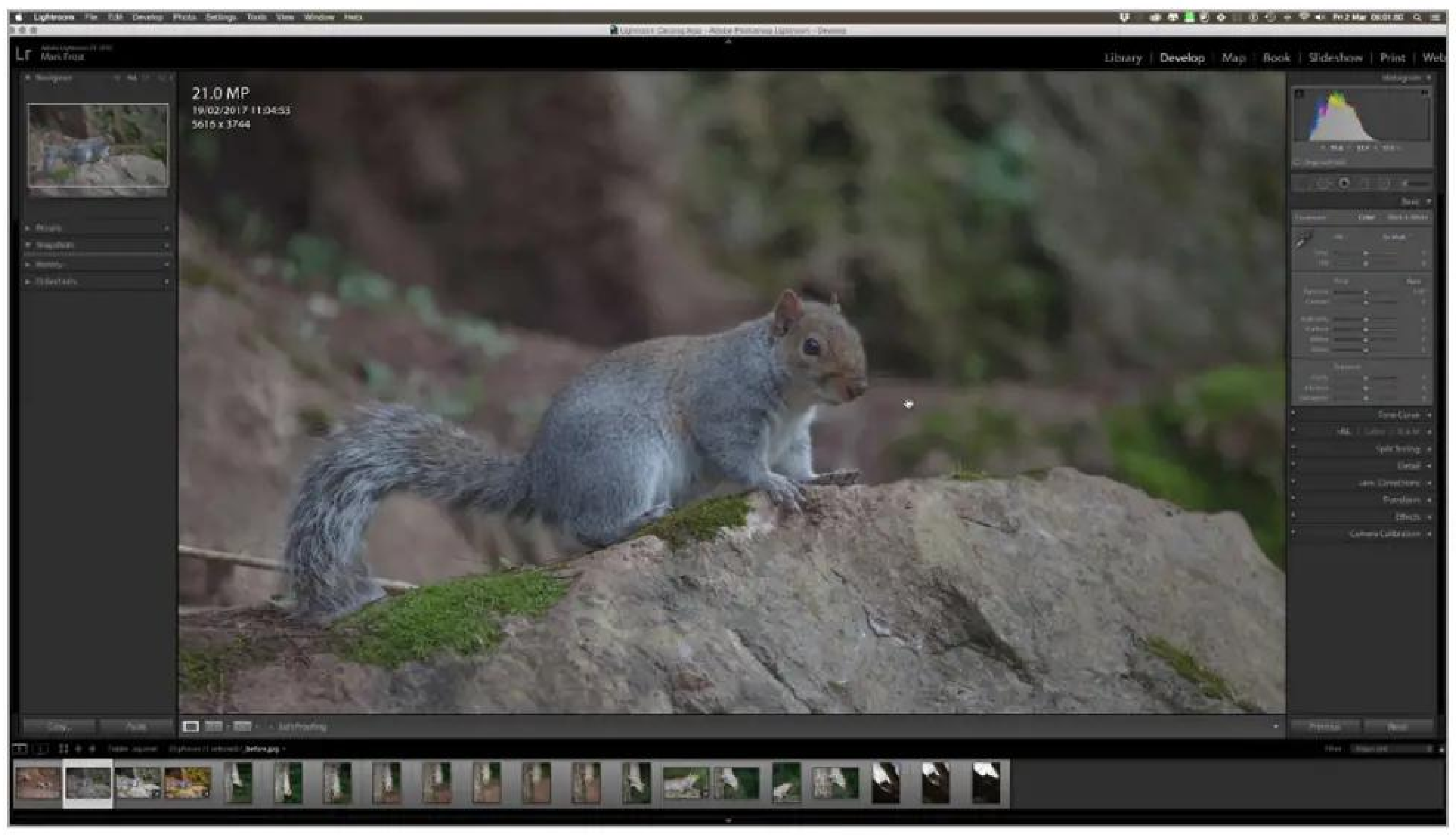
9 Making these careful incremental adjustments to an image can get confusing and it's easy to make mistakes. If you make an adjustment that you're not happy with, you can instantly undo it and go back to a previous step using the History panel in the left sidebar; just click on the step to which you'd like to return.



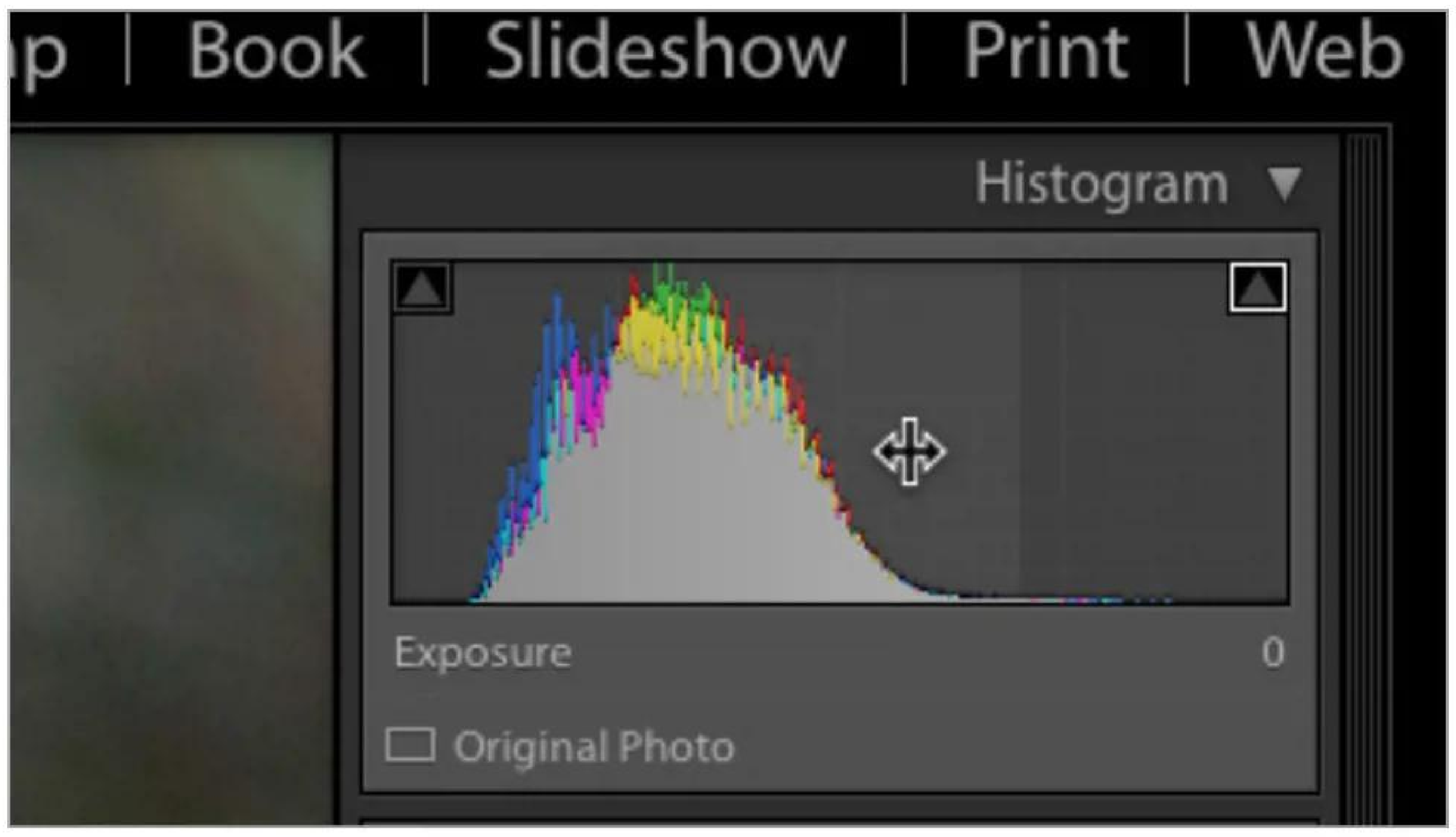
10 Adjusting colour in a landscape scene such as this is very subjective but it's what looks the best to you as the photographer that really matters. Here we've adjusted Clarity, Vibrance, Saturation, Highlights and Shadows and the result is definitely a significant improvement over the image we started with and has brighter colours and better contrast.

Improve Contrast with Tone Controls

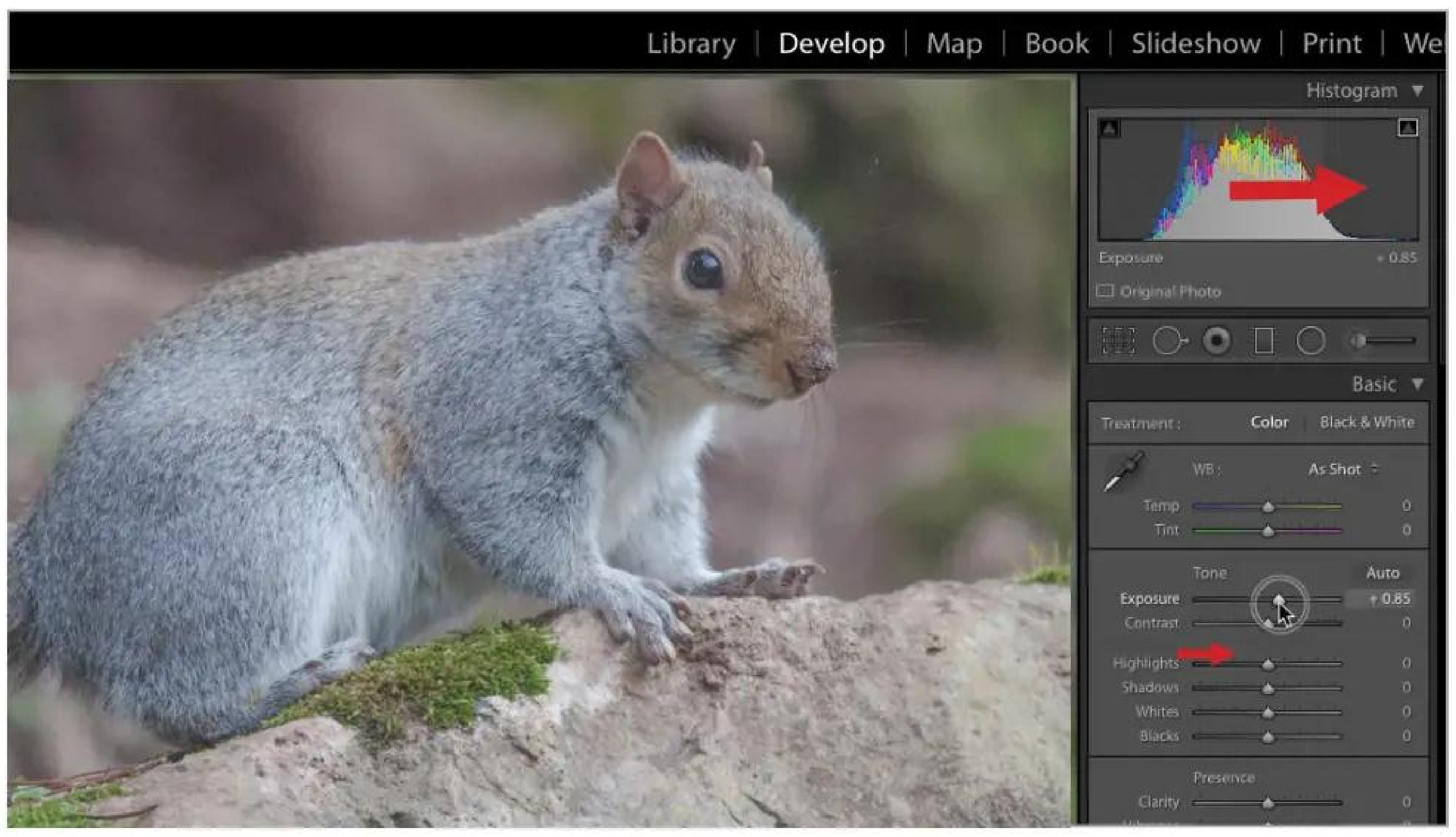
Lightroom's advanced Tone controls are far more sophisticated than the simple Brightness/Contrast controls found in other editing programs. Lightroom makes precise adjustments to specific ranges of brightness, so you can quickly turn mediocre shots into masterpieces.


21.0 MP
Library | Develop | Map | Book | Slideshow | Print | Web

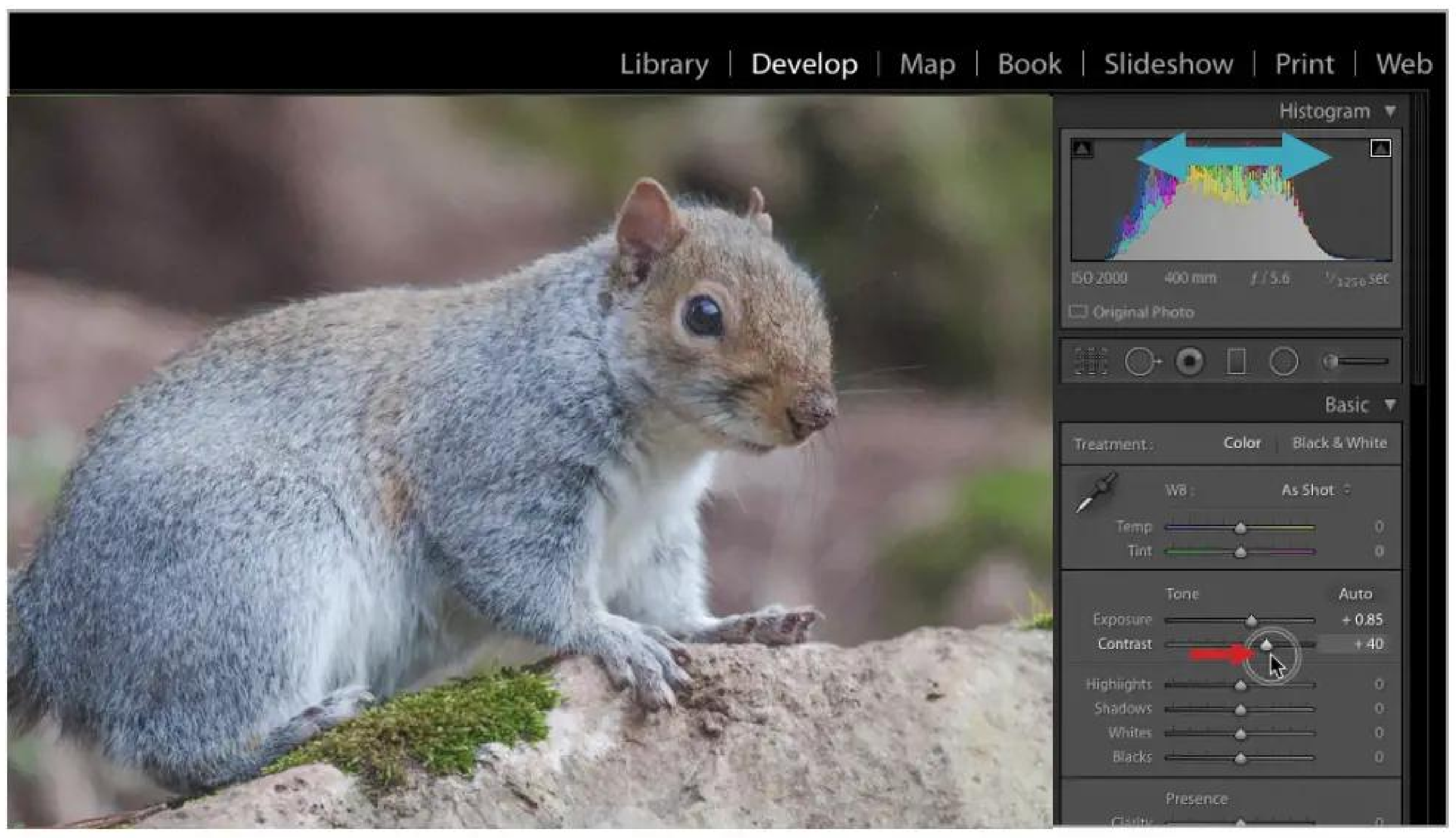
1 Even with a good quality digital SLR it's possible to produce a shot with limited contrast. Reasons include incorrect metering, poor lighting or simply a low-contrast scene. In our example shot here it's a combination of all three. The shot is under-exposed, the lighting is flat and it's simply not a contrasted scene. Let's see how we can help.


p | Book | Slideshow | Print | Web
Histogram
Exposure 0
☐ Original Photo

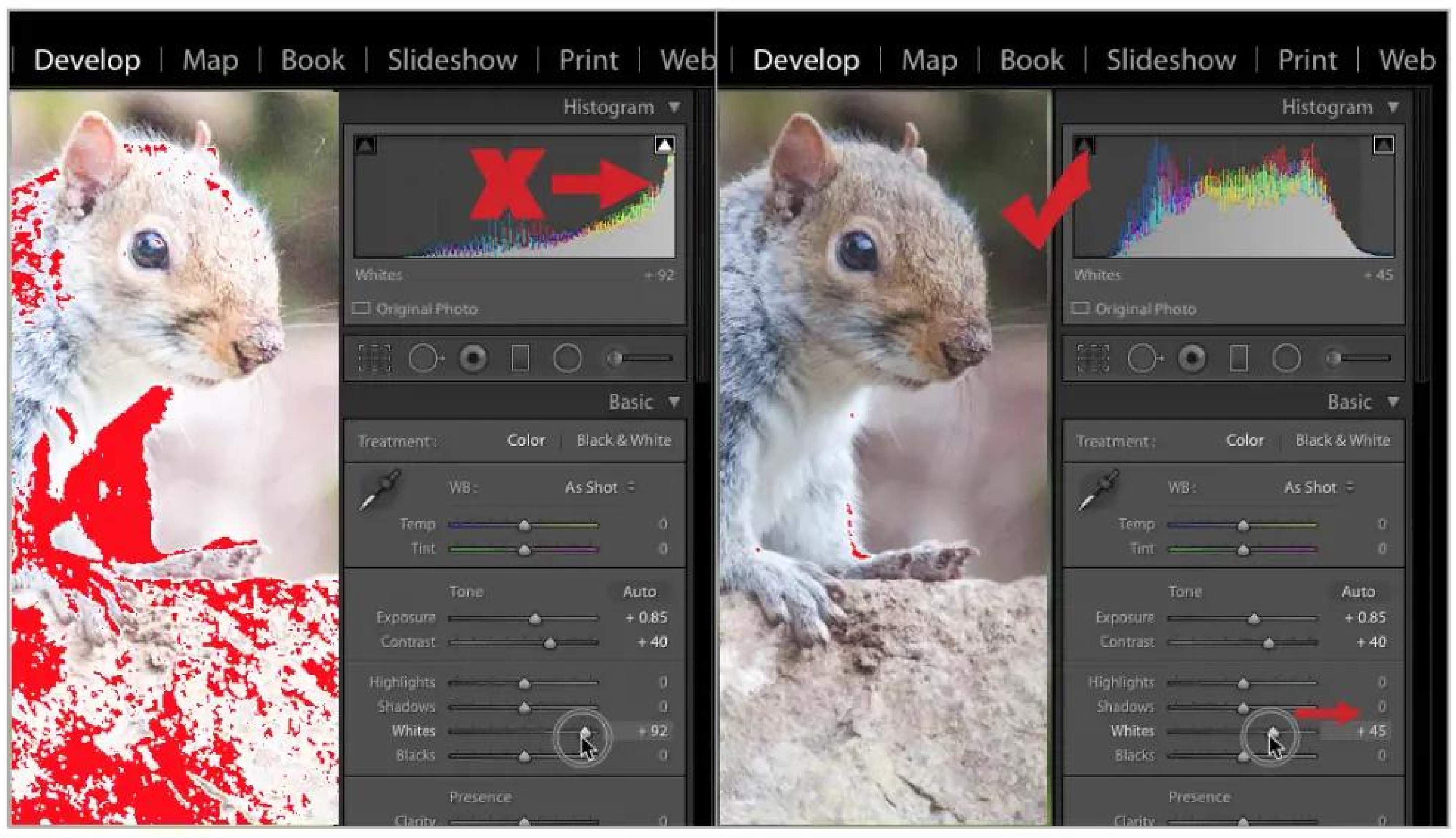
2 One look at the histogram reveals the nature of the problem. The image lacks both highlights and shadows and the histogram curve is bunched up towards the darker end of the scale, indicating under exposure. The first step is to correct that under-exposure, so we need to open up the Basic tab on the right-hand sidebar.


Library | Develop | Map | Book | Slideshow | Print | We
Histogram
Exposure + 0.85
☐ Original Photo
Basic
Treatment : Color Black & White
WB : As Shot
Temp
Tint
Tone Auto
Exposure + 0.85
Contrast
Highlights
Shadows
Whites
Blacks
Presence
Clarity

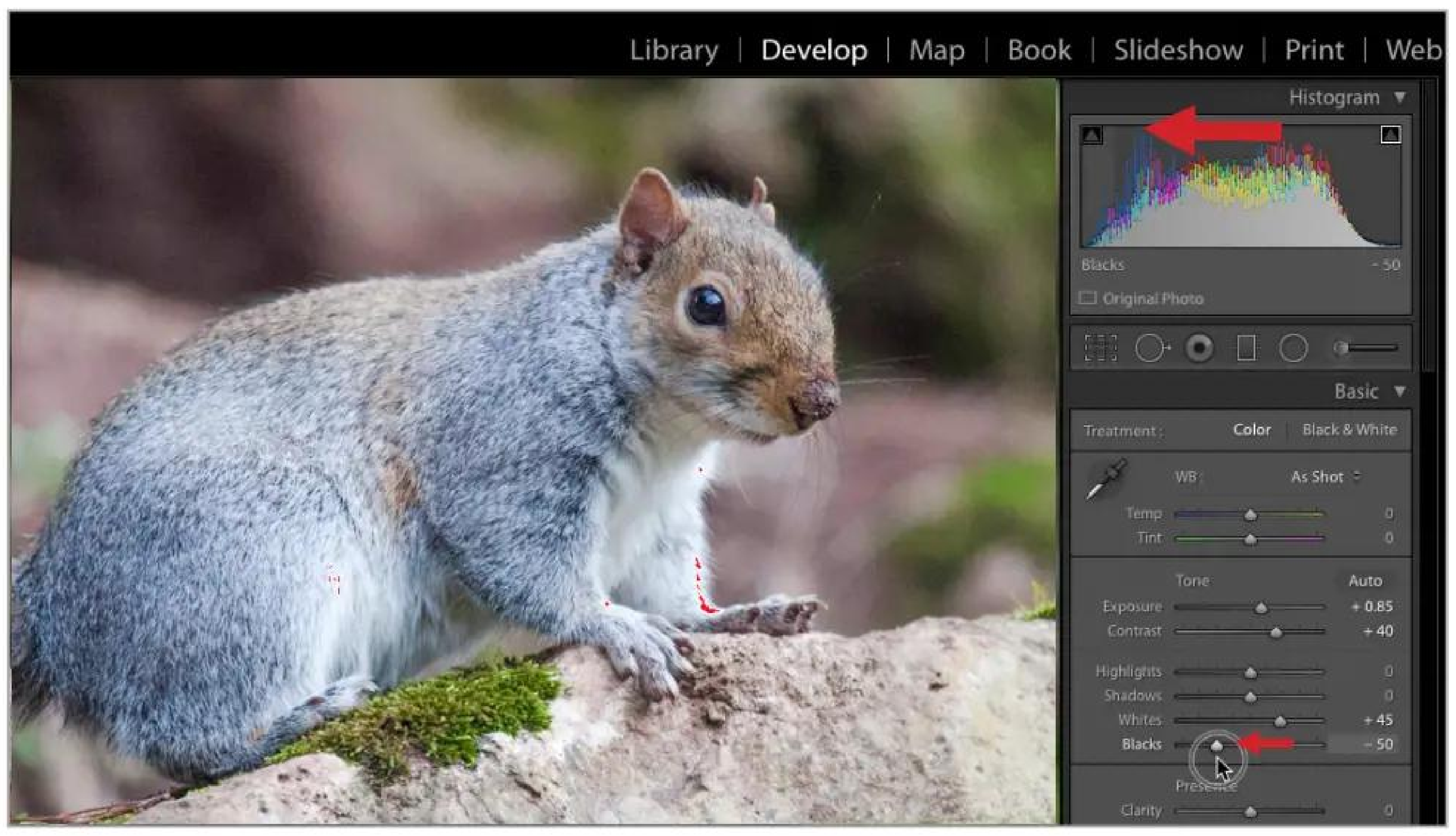
3 To increase the exposure, simply take the Exposure slider in the Basic panel and move it towards the right. Keep an eye on the histogram as you do this. What you want is to position the bunched-up curve roughly in the middle of the graph. In this case an increase of almost a whole stop (+0.85) will be sufficient.


Library | Develop | Map | Book | Slideshow | Print | Web
Histogram
ISO 2000 400 mm f / 5.6
☐ Original Photo
Basic
Treatment : Color Black & White
WB : As Shot
Temp
Tint
Tone Auto
Exposure + 0.85
Contrast + 40
Highlights
Shadows
Whites
Blacks
Presence
Clarity

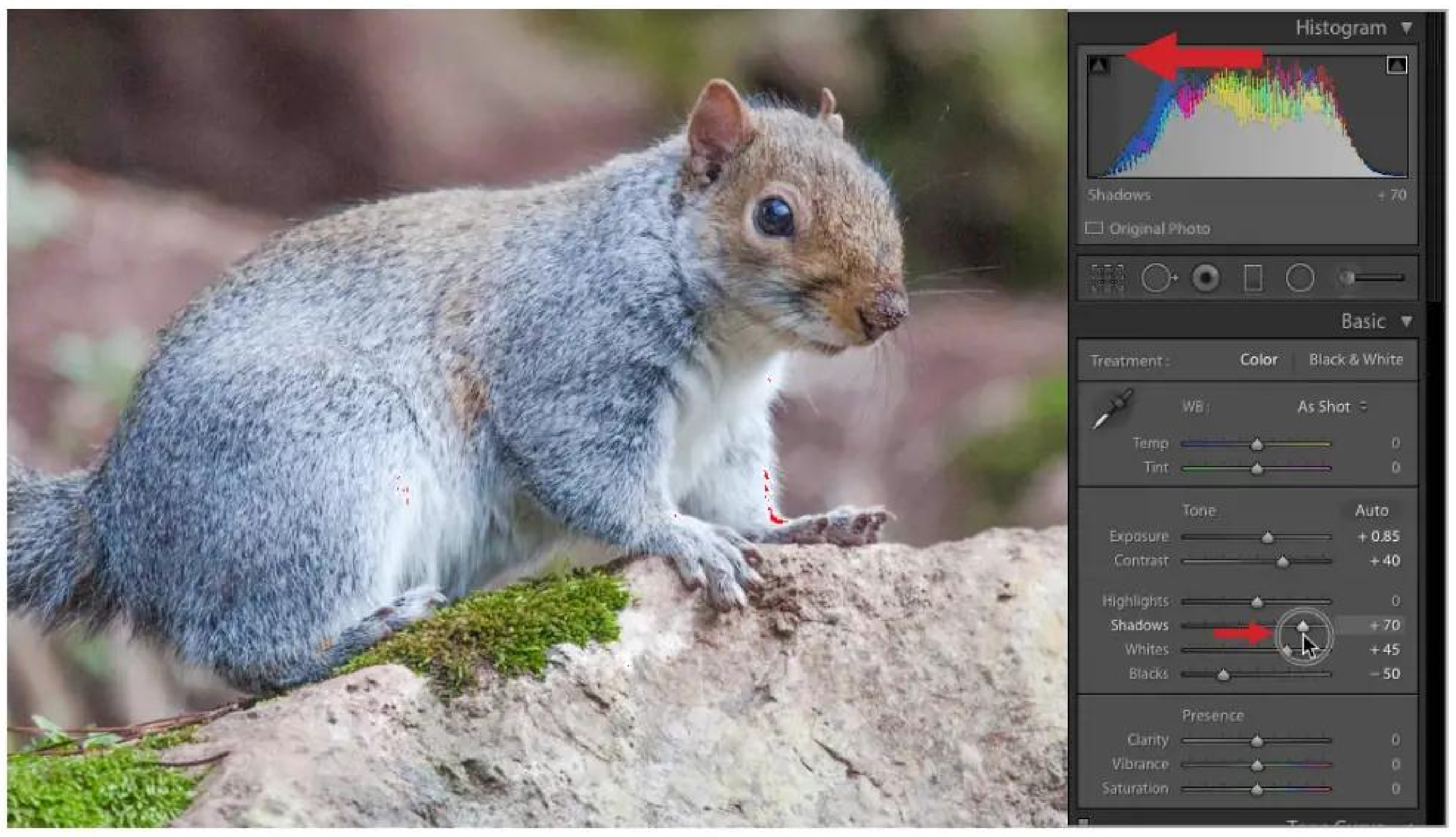
4 Some improvement can be made by using the Contrast slider and moving it a little to the right; you can see that the histogram curve spreads out, as highlights are brightened and shows darkened. Don't take it too far though, because you can do a better job fine-tuning with the other Tone controls. In this case an adjustment of +40 is plenty.


Develop | Map | Book | Slideshow | Print | Web
Histogram
Whites +92
Original Photo
Basic
Treatment: Color Black & White
WB: As Shot
Temp 0
Tint 0
Tone Auto
Exposure +0.85
Contrast +40
Highlights 0
Shadows 0
Whites +92
Blacks 0
Presence
Develop | Map | Book | Slideshow | Print | Web
Histogram
Whites +45
Whites +45

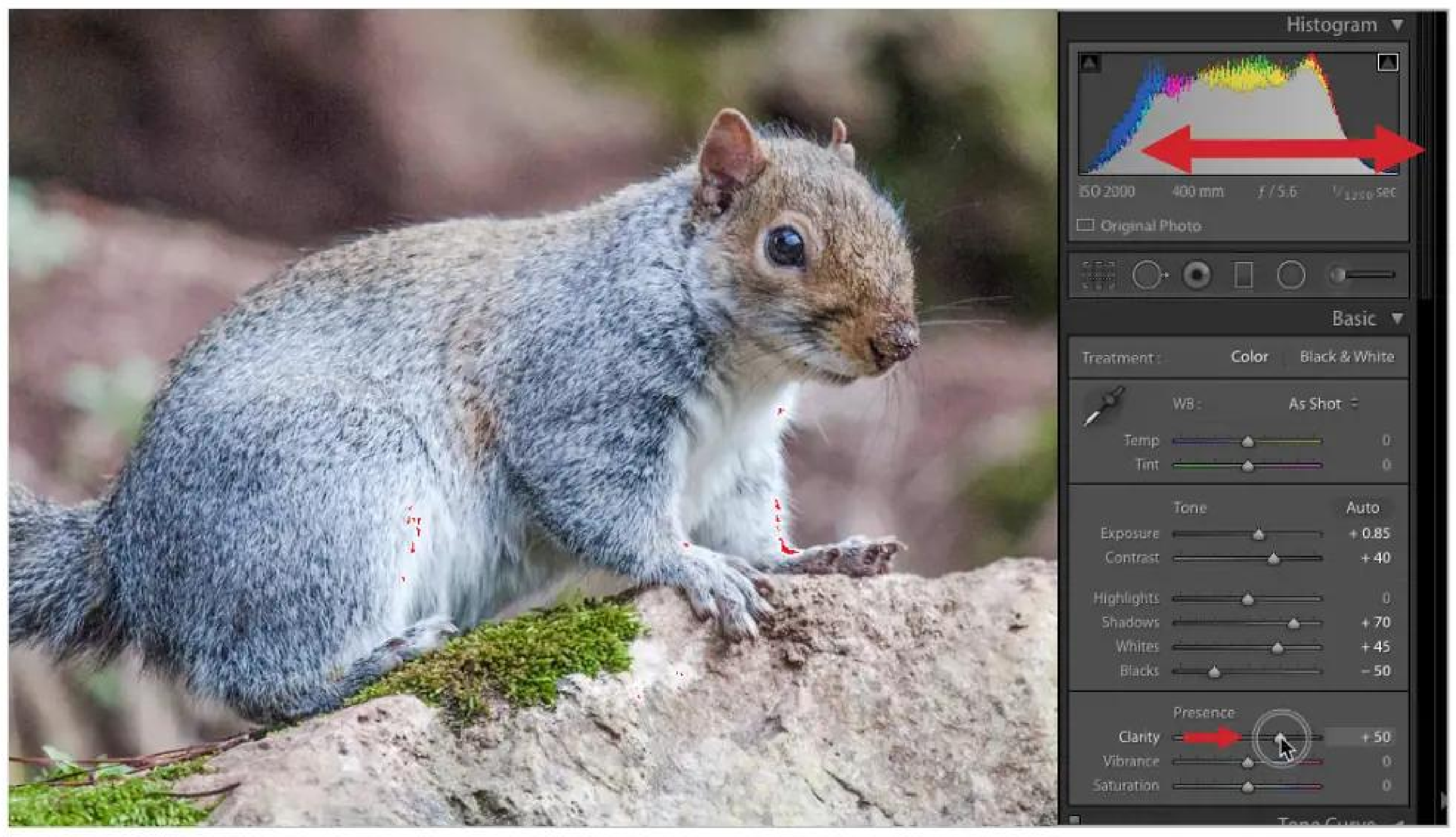
5 Next, move the Whites slider to the right, so that the curve moves to the right-hand edge of the graph, but not too far. At this point it's a good idea to click on the Highlight Clipping warning in the upper right corner of the histogram window, so that you can see any clipped highlights in red. A value of +45 is just right.


Library | Develop | Map | Book | Slideshow | Print | Web
Histogram
Blacks -50
Original Photo
Basic
Treatment: Color Black & White
WB: As Shot
Tone Auto
Exposure +0.85
Contrast +40
Highlights 0
Shadows 0
Whites +45
Blacks -50
Presence
Clarity 0

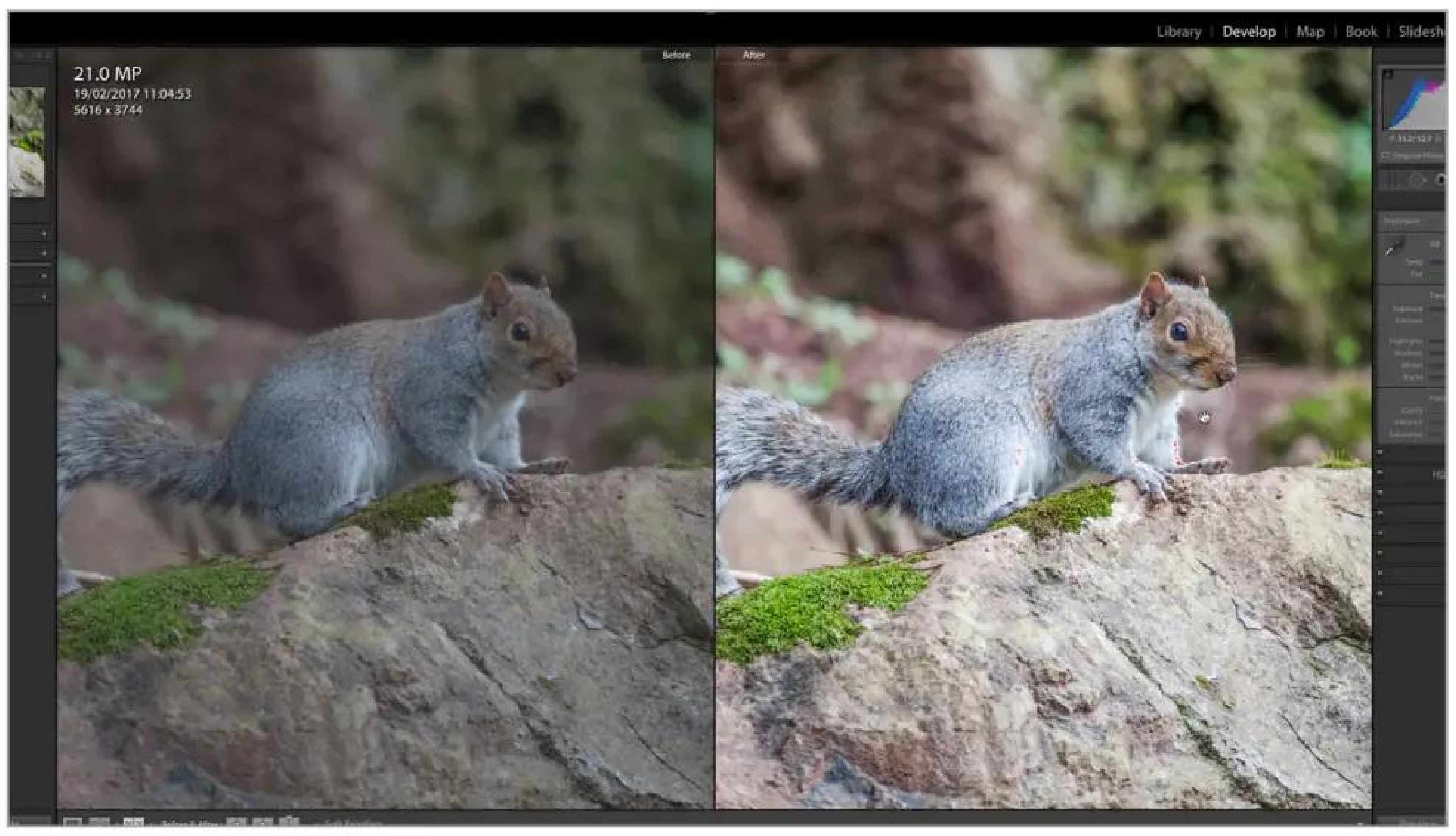
6 In order to improve the shadow definition, move the Blacks slider to the right. As before, turn on the Shadow Clipping warning but don't worry too much about a few clipped pixels in the deeper shadows. Move the left-hand end of the histogram curve to the left until it approaches the left border of the graph. -50 is fine for this example.


Histogram
Shadows +70
Original Photo
Basic
Treatment: Color Black & White
WB: As Shot
Tone Auto
Exposure +0.85
Contrast +40
Highlights 0
Shadows +70
Whites +45
Blacks -50
Presence
Clarity 0
Vibrance 0
Saturation 0

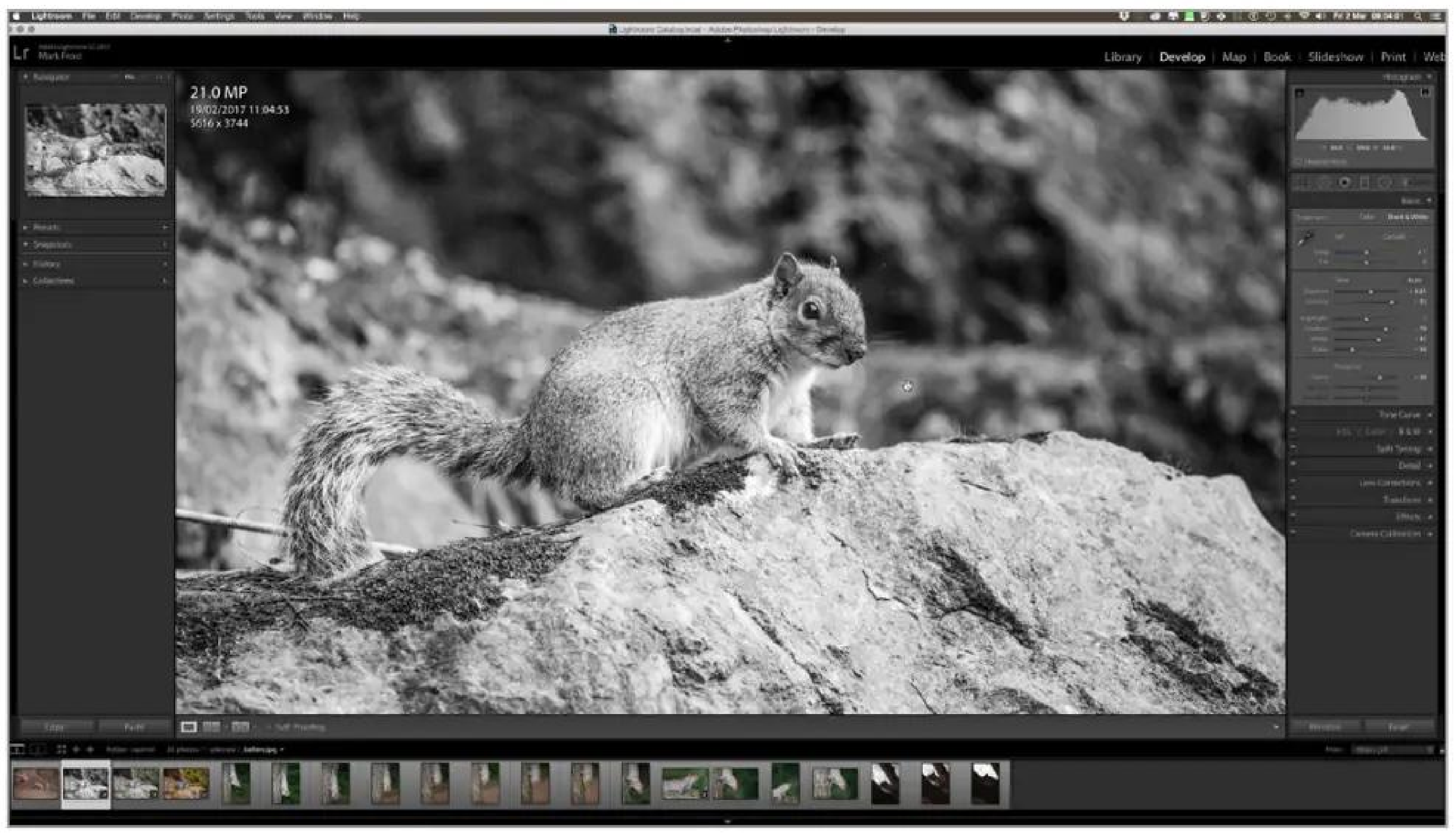
7 You can further fine-tune the shadow definition by moving the Shadows slider to the left a little, which also has the effect of darkening the foliage in the background. Keep an eye on the histogram clipping as you're moving the slider; if necessary move the Blacks slider back to the right a little. Try to balance the adjustment between these controls.


Histogram
ISO 2000 400 mm f / 5.6
Original Photo
Basic
Treatment: Color Black & White
WB: As Shot
Temp 0
Tint 0
Tone Auto
Exposure +0.85
Contrast +40
Highlights 0
Shadows +70
Whites +45
Blacks -50
Presence
Clarity +50
Vibrance 0
Saturation 0

8 So far, you've improved contrast by improving the shadows and highlights but the mid-tones are left looking a little flat. Improve these by using the Clarity control, which enhances mid-tone contrast. With the adjustments that you've already made there's no need to move it far to produce the desired result. +50 is enough to add punch.


Library | Develop | Map | Book | Slideshow
21.0 MP
19/02/2017 11:04:53
5616 x 3744
Before
After

9 With a change to the white balance, a small adjustment in Vibrance to add a bit of brightness to the colours, plus a bit of minor cropping to tighten up the composition, the end result is a much better photo. Comparing the before and after views side-by-side using the view buttons shows up just how much better the adjusted photo looks.

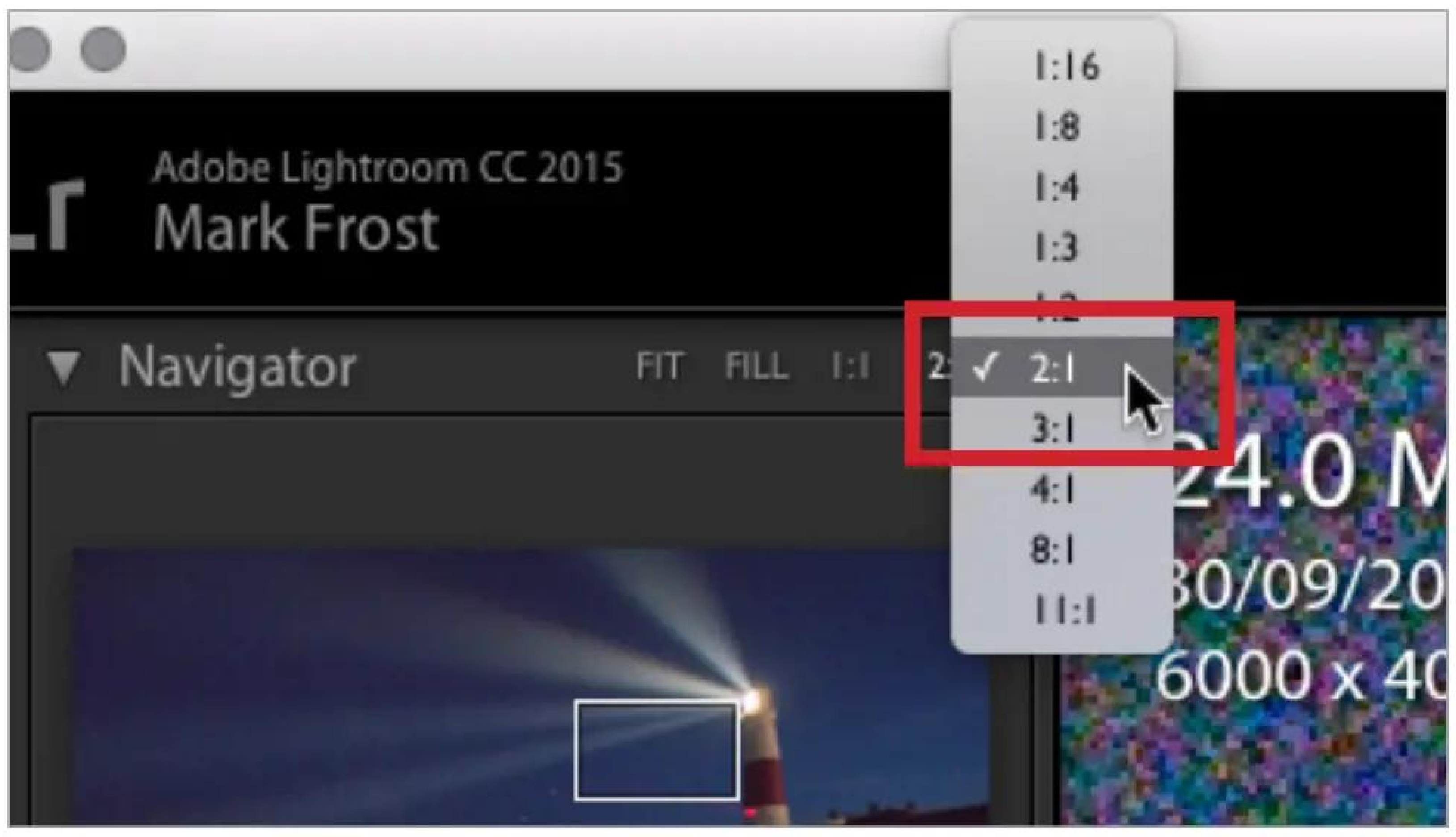

Library | Develop | Map | Book | Slideshow | Print | Web
21.0 MP
19/02/2017 11:04:53
5616 x 3744

10 If you want to turn the image monochrome, you can use a similar process in the Black & White option of the Basic panel. The major difference is that the exposure hasn't been increased by as much and obviously Vibrance isn't used; otherwise the adjustments are very similar. We'll look more closely at Black & White elsewhere.

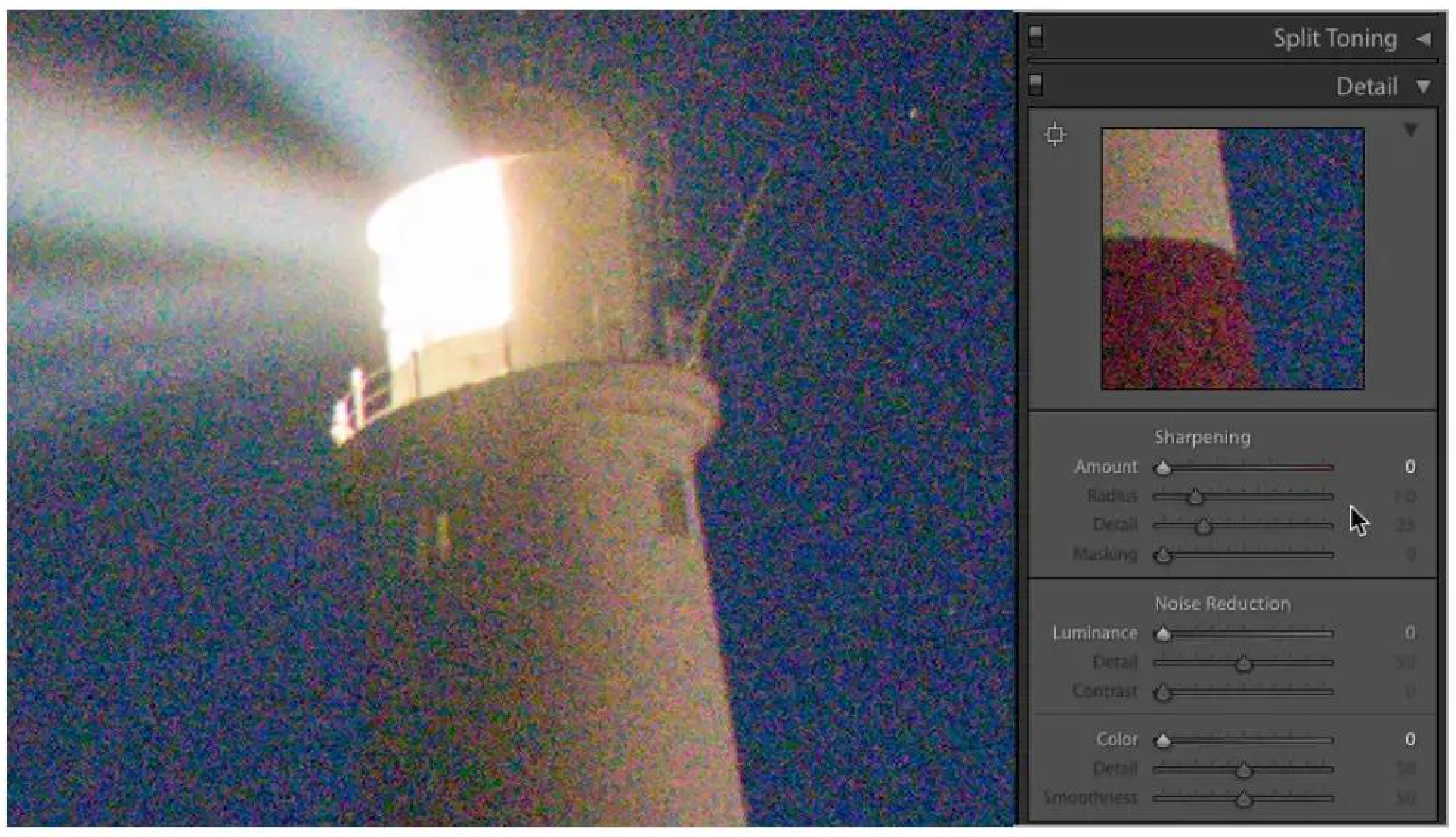
Reducing High ISO Noise

Image noise occurs when the signal from the photocells in the camera's sensor is amplified to boost the image in low light, in other words when you increase the ISO setting. It shows up in your photos as a speckled grain of random colour and brightness.

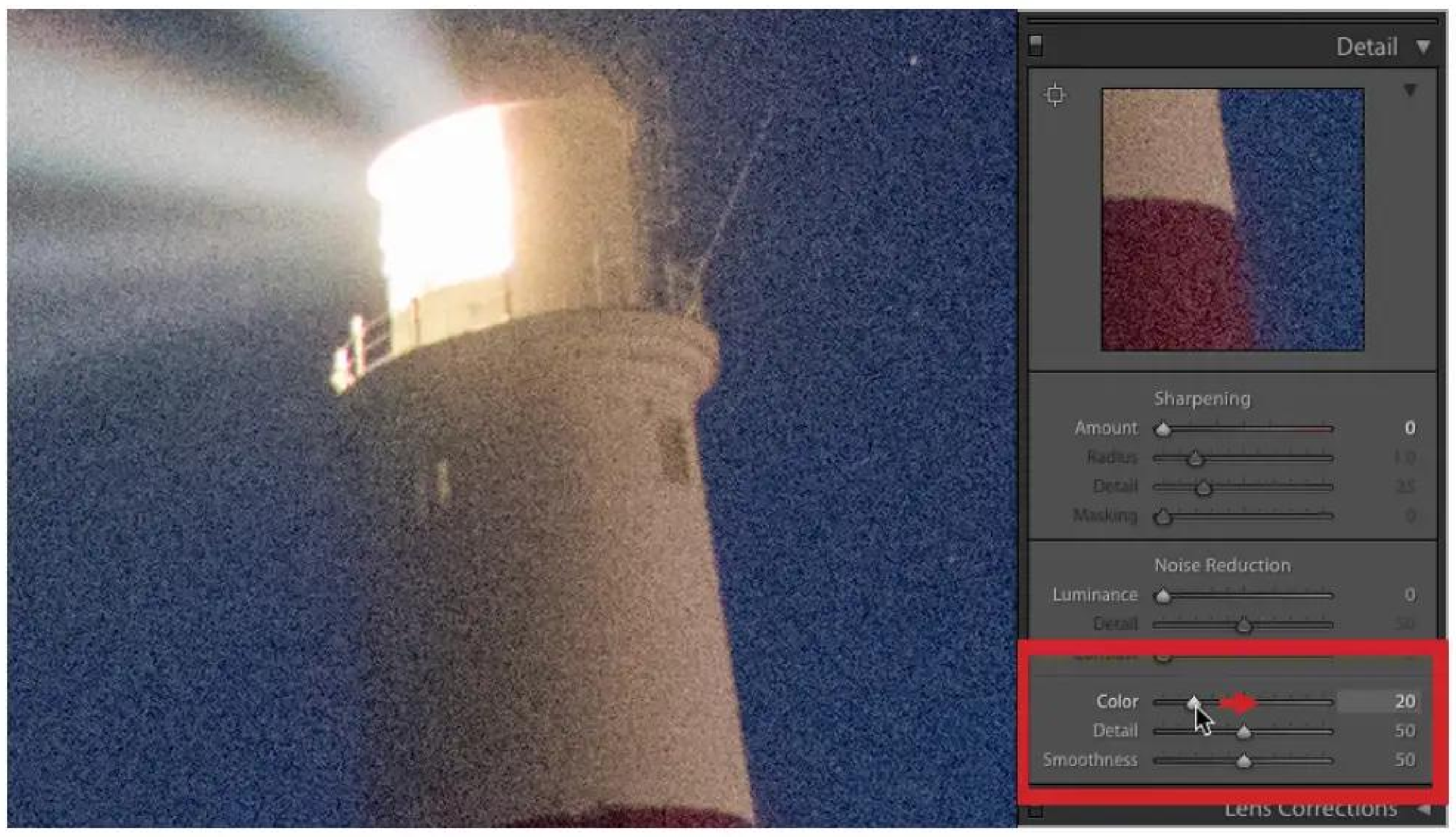
1 All digital cameras suffer from noise but some control it better than others. Modern top-end digital SLRs can comfortably shoot at 6400 ISO without too much trouble but older or cheaper cameras can suffer image ruining noise problems as low as 1600 ISO. This example was shot on a five year old Panasonic compact at 3200 ISO and is very noisy.


Adobe Lightroom CC 2015
Mark Frost
Navigator
FIT
FILL
1:1
1:16
1:8
1:4
1:3
2:1
3:1
4:1
8:1
11:1
24.0 M
30/09/20
6000 x 40

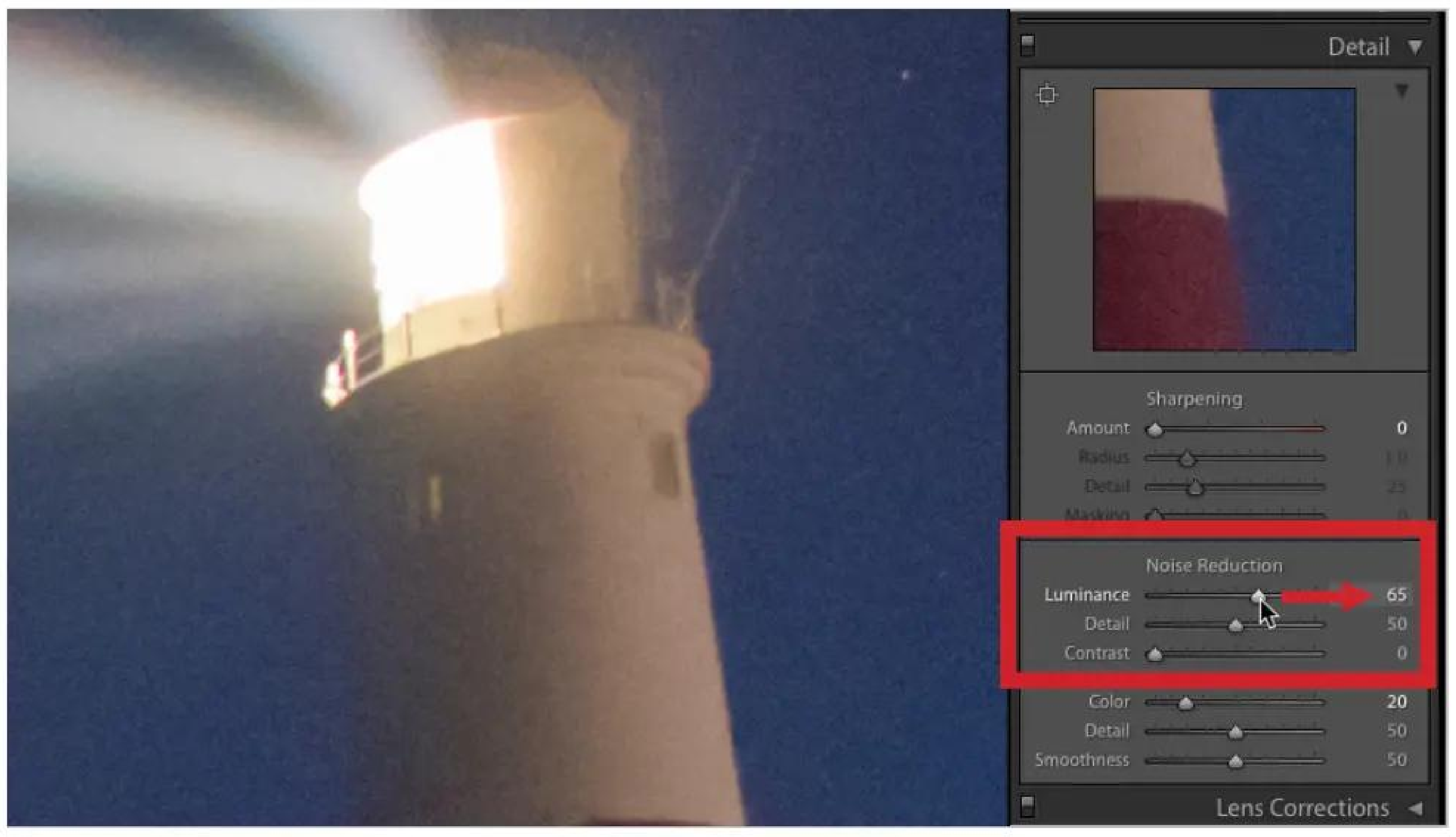
2 Working on reducing noise requires a close-up view of the image, to be able to judge fine detail, so we need to zoom in. At the top of the left sidebar, on the right-hand end of the title bar of the Navigator panel, you'll see a button for a drop-down menu. Click on it and select 2:1 or even 3:1 for a zoomed-in view.


Split Toning
Detail
Sharpening
Amount
0
Radius
Detail
Masking
Noise Reduction
Luminance
0
Detail
Contrast
Color
0
Detail
Smoothness

3 In the right-hand sidebar, open the Detail panel. This is where you'll find the controls to adjust Sharpening and Noise Reduction. You might find that images from your camera have some sharpening and noise reduction already applied by default but for this example set all the sliders are set to zero for a worst-case scenario.


Detail
Sharpening
Amount
0
Radius
Detail
Masking
Noise Reduction
Luminance
0
Detail
Color
20
Detail
50
Smoothness
50
Lens Corrections

4 The most obvious problem with our example image is colour noise; it's the speckling of random coloured dots all over the image. Fortunately, this is very easy to correct. Simply move the Color slider slowly to the right until the colour noise disappears. Even for an image this noisy, just +20 will do the trick.

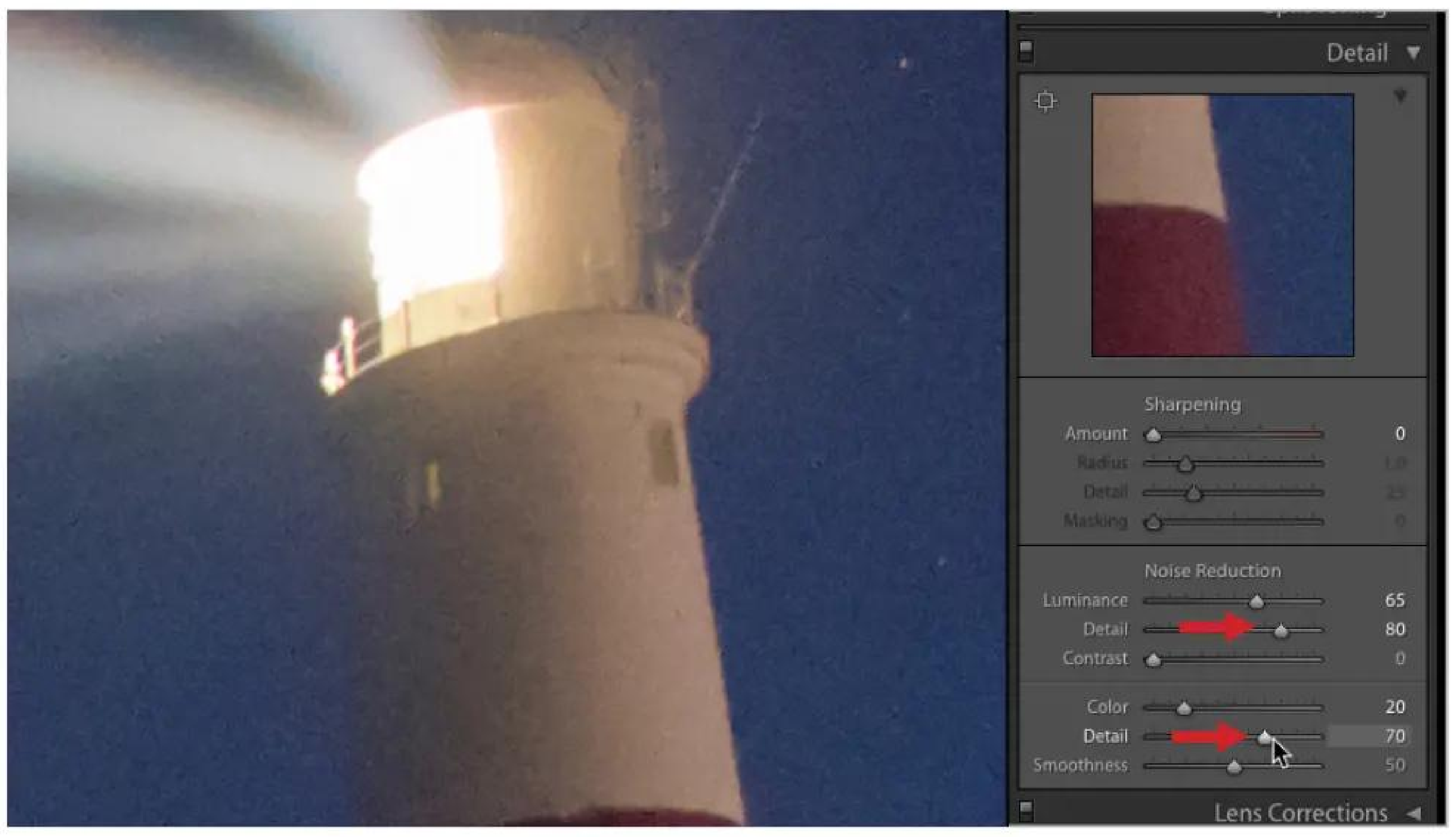


Sharpening
Amount 0
Radius 1.0
Detail 25
Masking 0

Noise Reduction
Luminance 65
Detail 50
Contrast 0

Color 20
Detail 50
Smoothness 50

5 Removing the colour noise just means that the luminance noise is more obvious; it's the salt-and-pepper dusting of light and dark pixels that look like grain on the image. To effectively remove this, move the Luminance slider to the right. You'll notice that this also evens out fine detail, so try to balance this against the noise reduction.

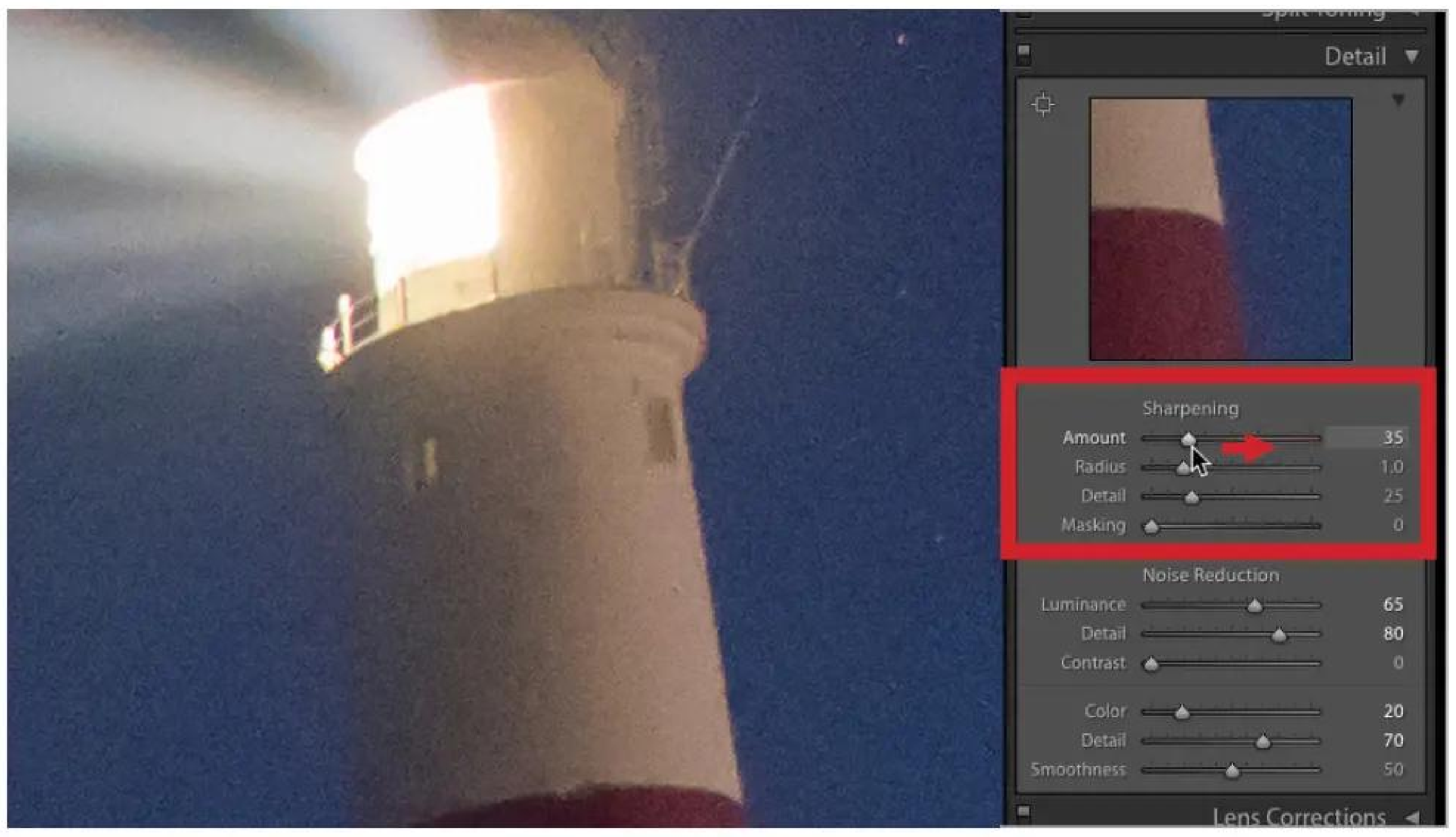


Sharpening
Amount 0
Radius 1.0
Detail 25
Masking 0

Noise Reduction
Luminance 65
Detail 80
Contrast 0

Color 20
Detail 70
Smoothness 50

6 Reducing luminance noise always involves reducing fine detail, that's just the way it works but now we can try to pull some of that detail back. Carefully move the Detail sliders on both the Luminance and Color noise sections towards the right, keeping a close eye on the zoomed-in image. These apply a sharpening effect that can improve edge detail.

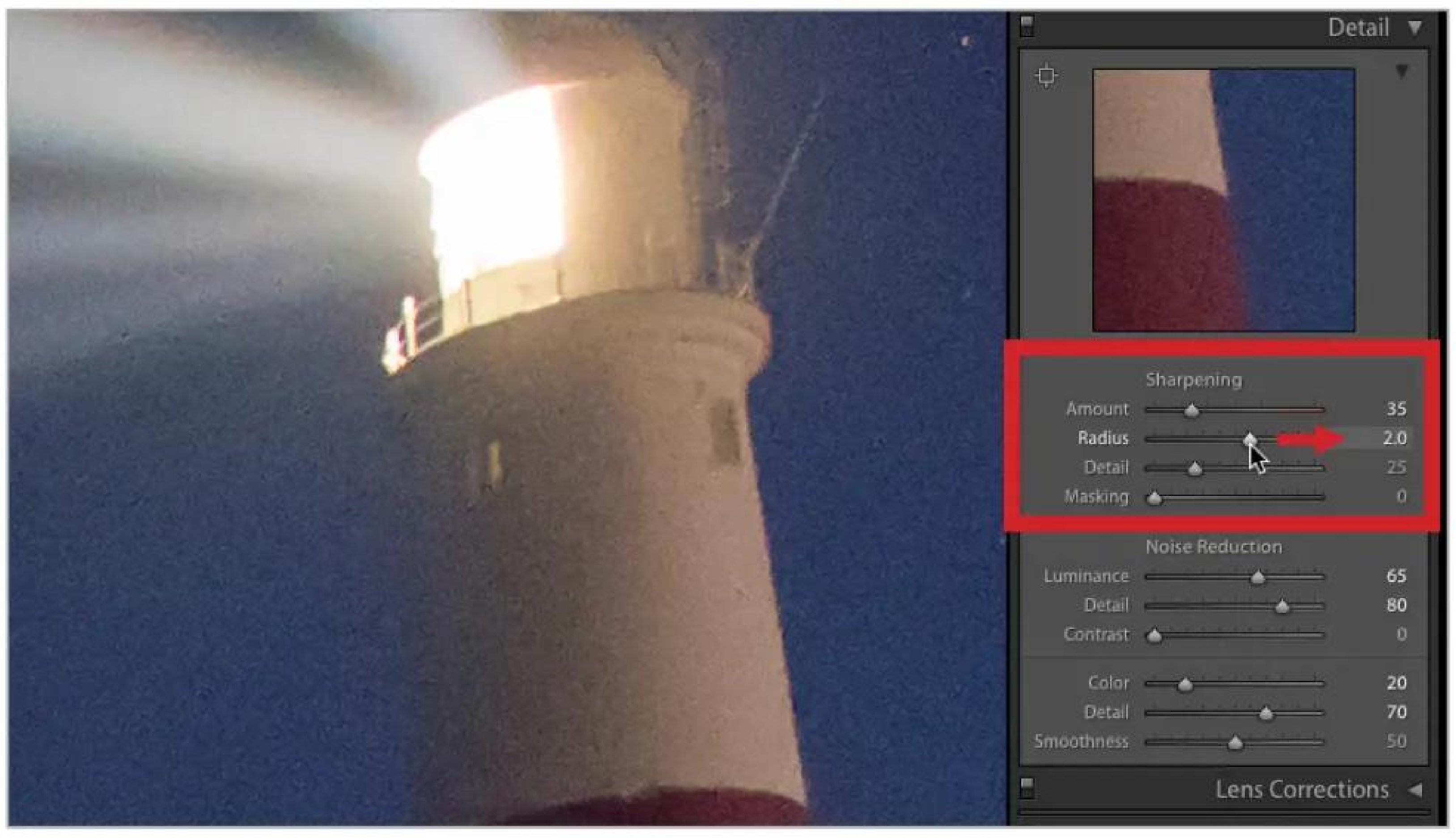


Sharpening
Amount 35
Radius 1.0
Detail 25
Masking 0

Noise Reduction
Luminance 65
Detail 80
Contrast 0

Color 20
Detail 70
Smoothness 50

7 You can recover yet more detail by applying sharpening to the noise-reduced image. In the Sharpening section, move the amount slider a little to the right. You'll see that the other sliders are now no longer greyed out. Carefully adjust the Amount to about 35 and you should see a significant improvement in detail sharpness.

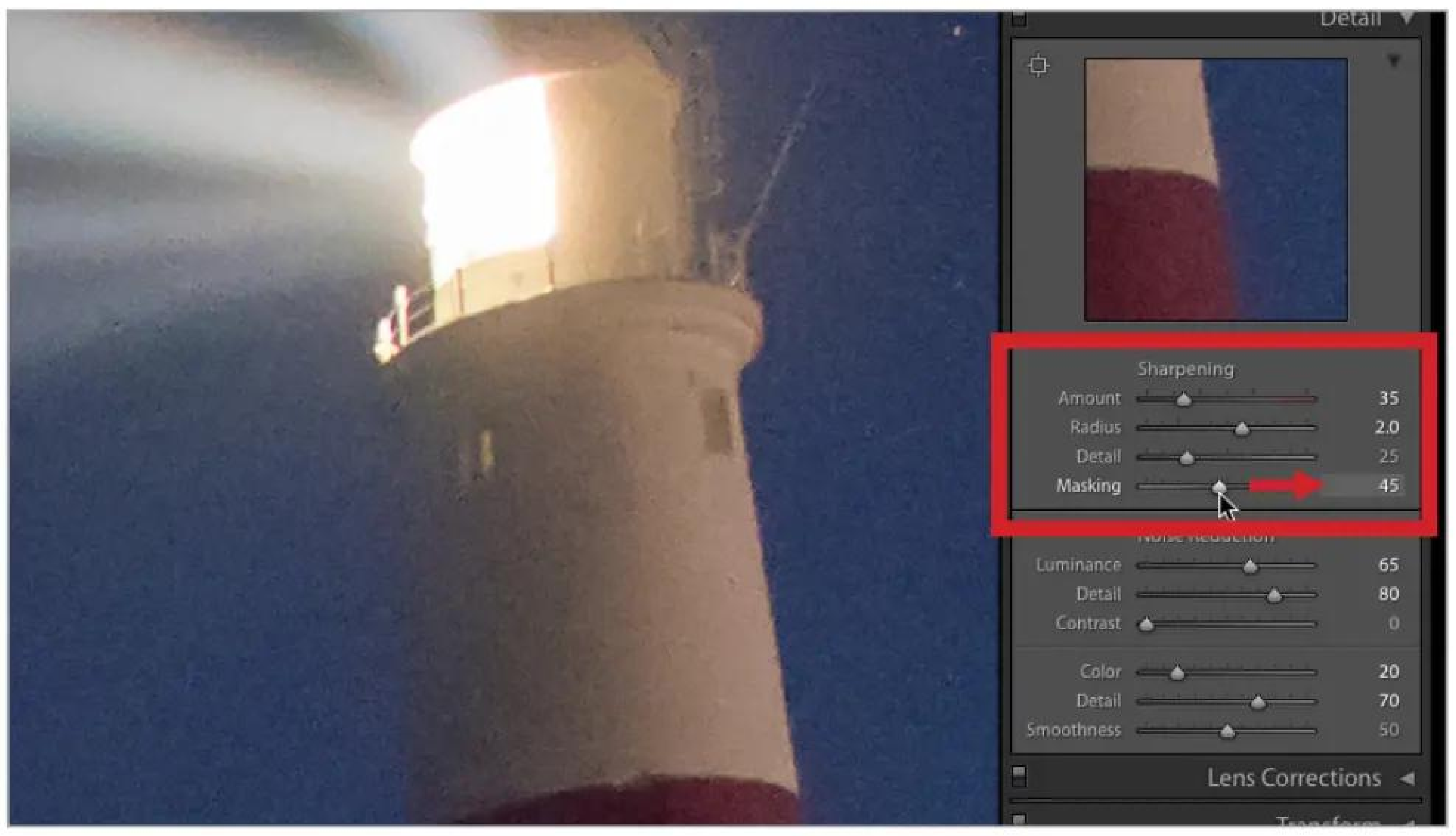


Sharpening
Amount 35
Radius 2.0
Detail 25
Masking 0

Noise Reduction
Luminance 65
Detail 80
Contrast 0

Color 20
Detail 70
Smoothness 50

8 You may notice some slightly jagged edges appearing as you increase the Sharpening Amount, especially between areas of contrasting colour or brightness. You can reduce this effect slightly by increasing the Radius slider from its default 1.0 up to 1.5 but don't take it higher or you risk introducing edge artefacts.

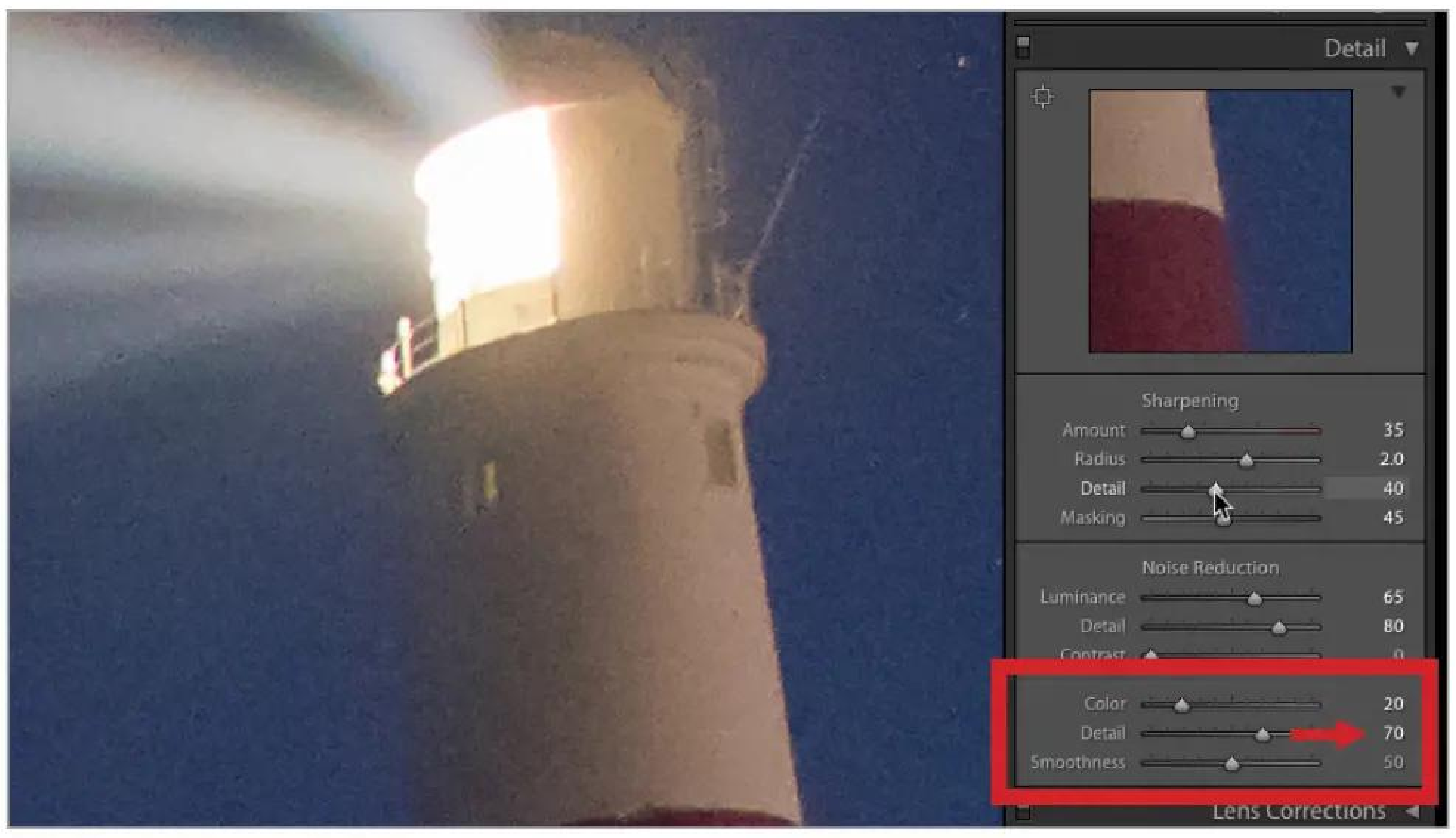


Sharpening
Amount 35
Radius 2.0
Detail 25
Masking 45

Luminance 65
Detail 80
Contrast 0

Color 20
Detail 70
Smoothness 50

9 Sharpening an image is a balancing act between improving detail definition and introducing spurious artefacts around those details and any remaining noise. You can improve things further by applying Masking. This is similar to Photoshop's very effective Unsharp Mask feature and reduces sharpening in areas with little detail.



Sharpening
Amount 35
Radius 2.0
Detail 40
Masking 45

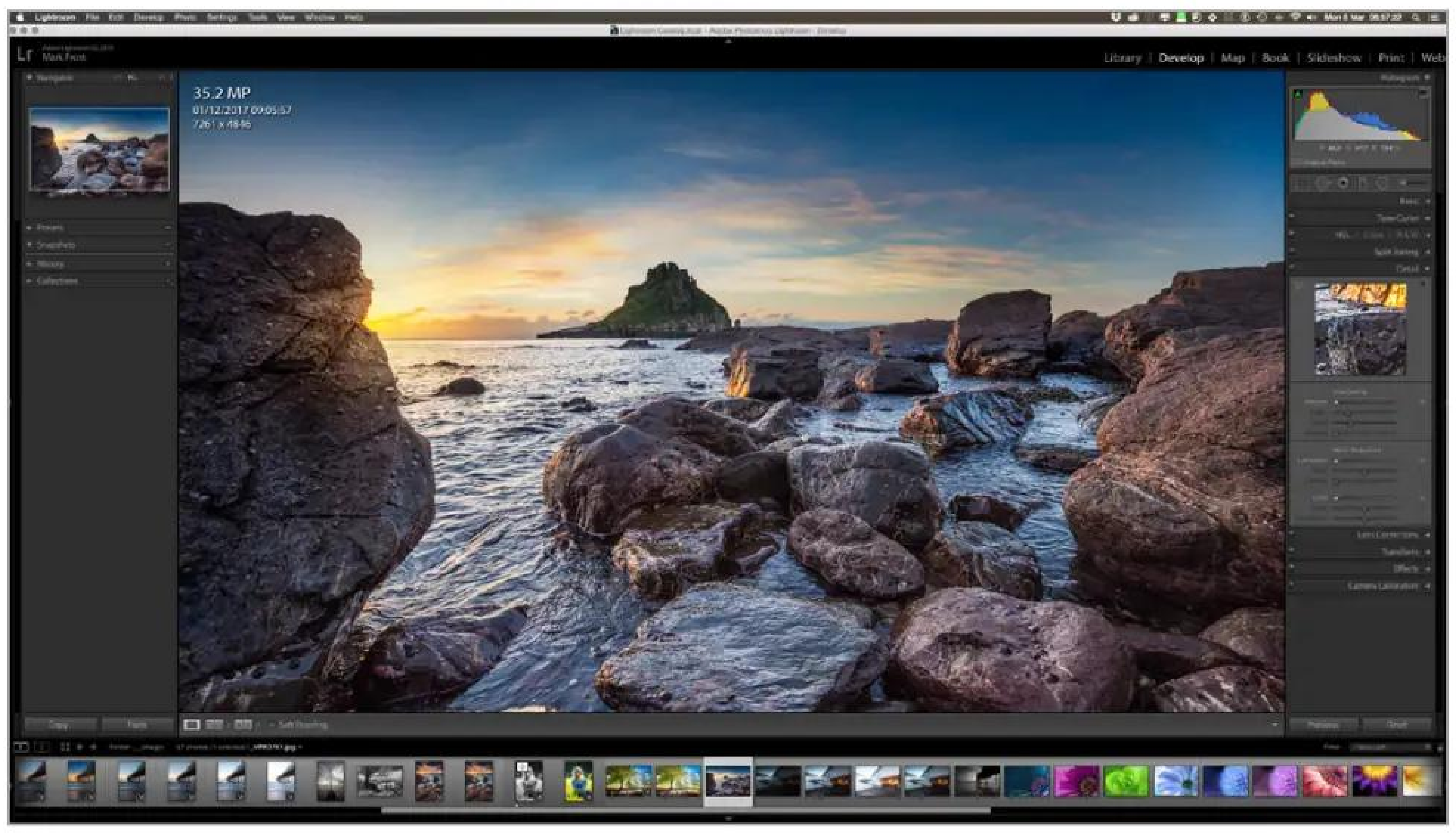
Noise Reduction
Luminance 65
Detail 80
Contrast 0

Color 20
Detail 70
Smoothness 50

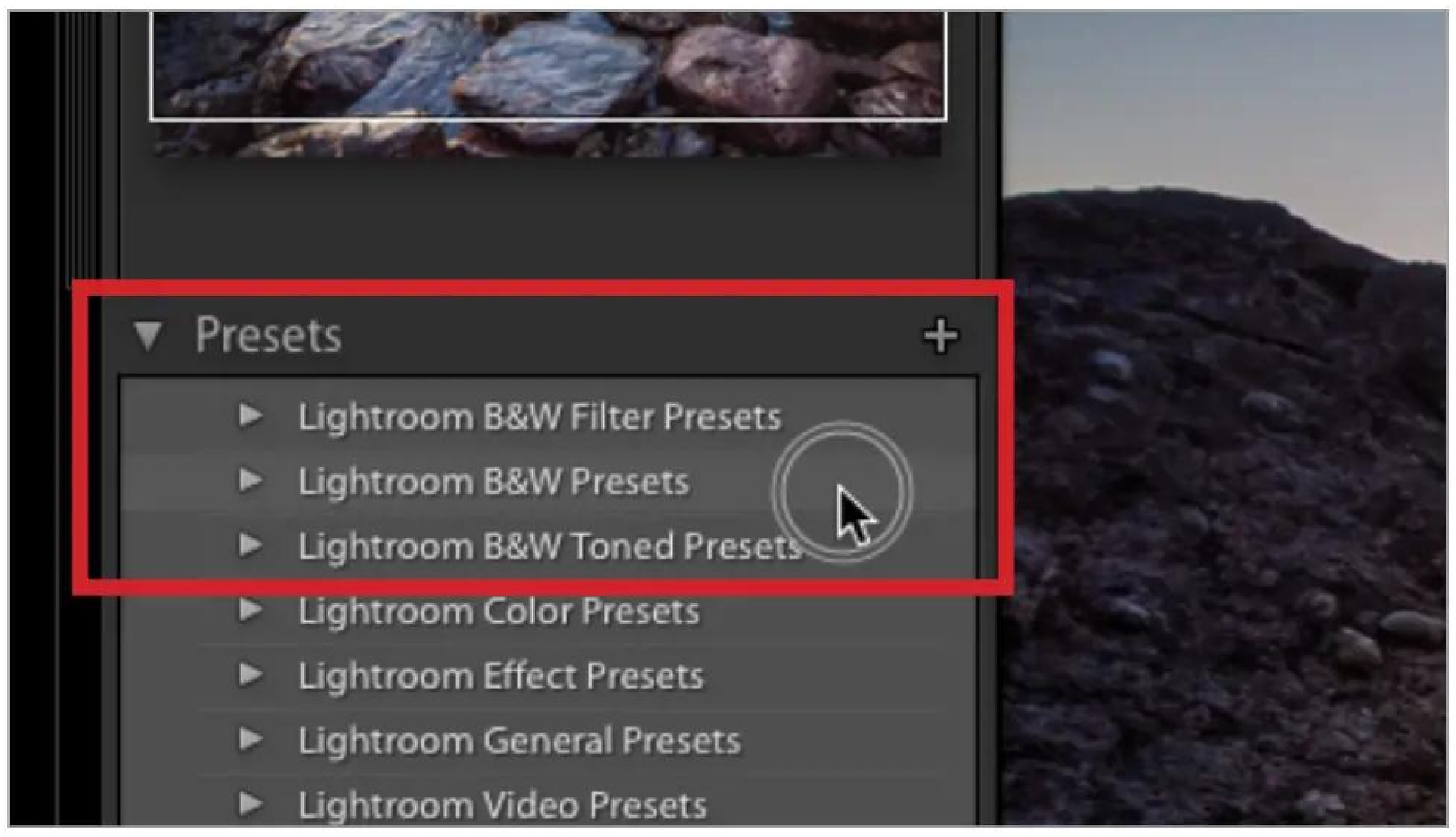
10 Finally there is the Detail slider. This controls how fine the sharpening of detail will go. For images like this, with not much fine detail, it can be left safely at its default setting. For images with more detail it should be increased. If you compare the before and after images in split-screen you can instantly see the effect you've achieved.

Improve Your Monochromes

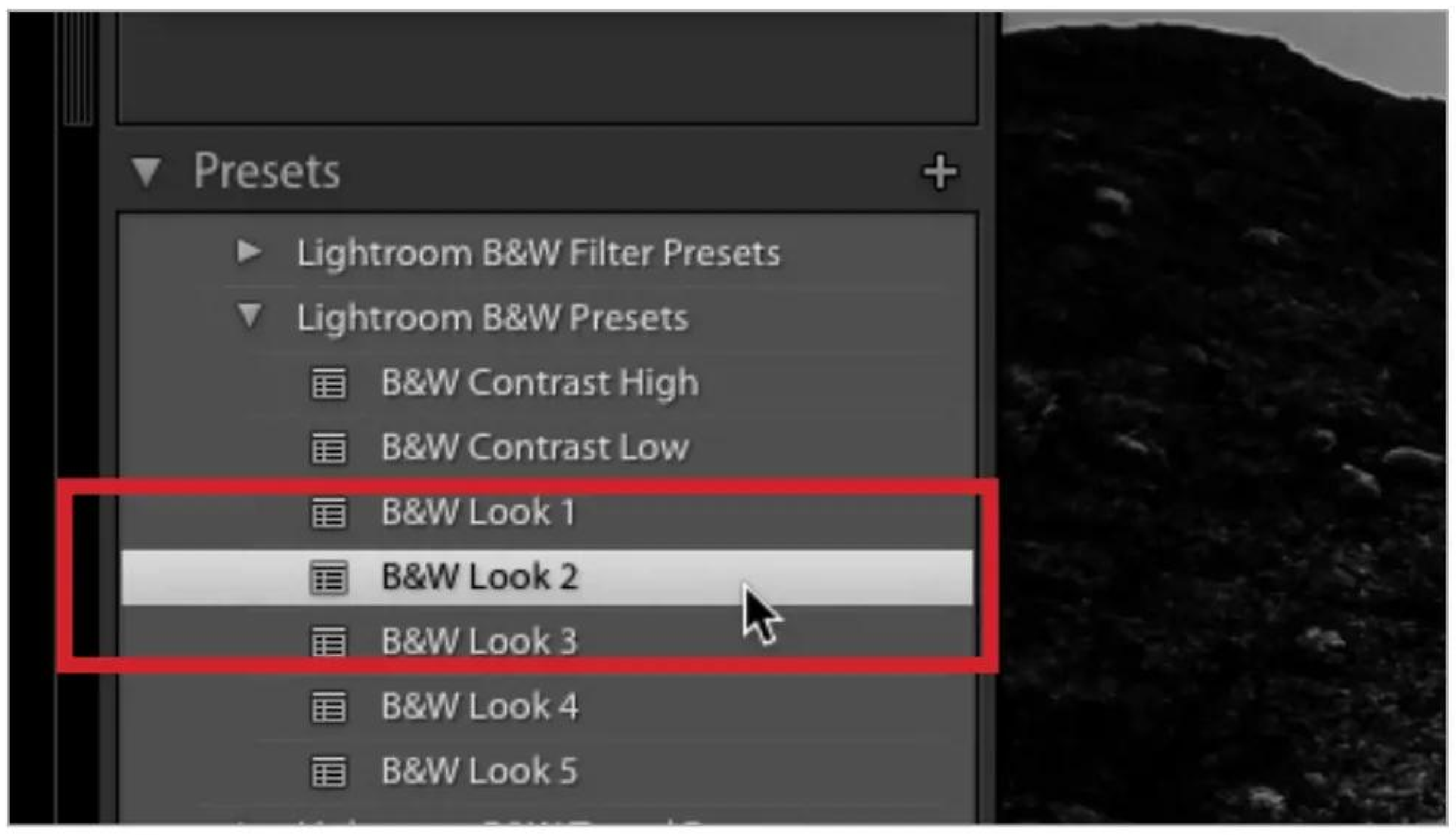
Black and white photography remains as popular today as it ever was and as you'd expect Lightroom supports monochrome photography with a wide range of dedicated features. Lightroom especially supports conversion from colour to monochrome, with great effect.



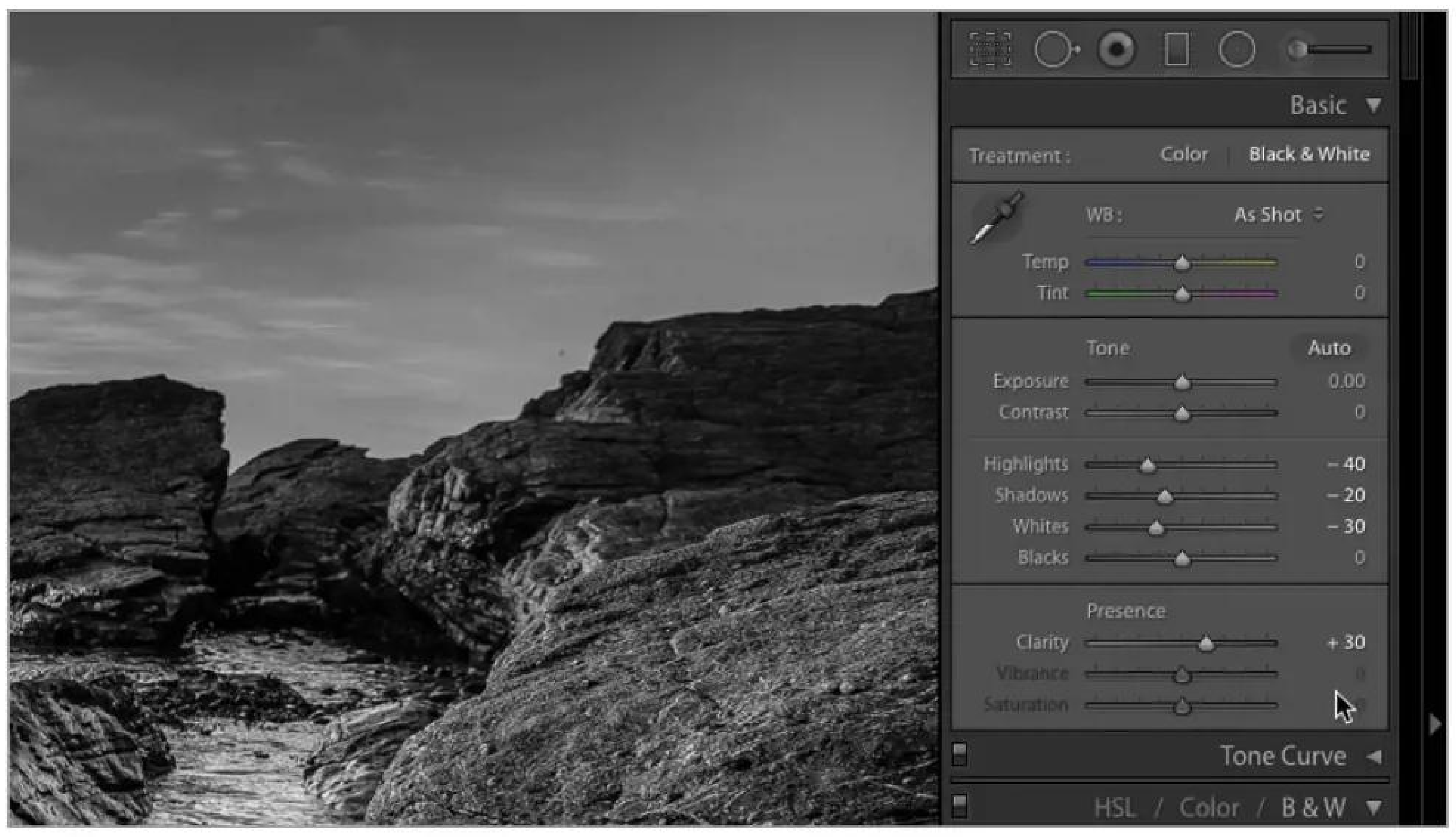
1 Successful monochrome photography is all about lighting, contrast and texture, so the best monochrome conversions will be images that emphasise these qualities. Artistic portrait studies, modern urban architecture and rugged rural landscapes are all good candidates. For our example, we'll be using this shot of a coastal sunrise.


Presets
Lightroom B&W Filter Presets
Lightroom B&W Presets
Lightroom B&W Toned Presets
Lightroom Color Presets
Lightroom Effect Presets
Lightroom General Presets
Lightroom Video Presets

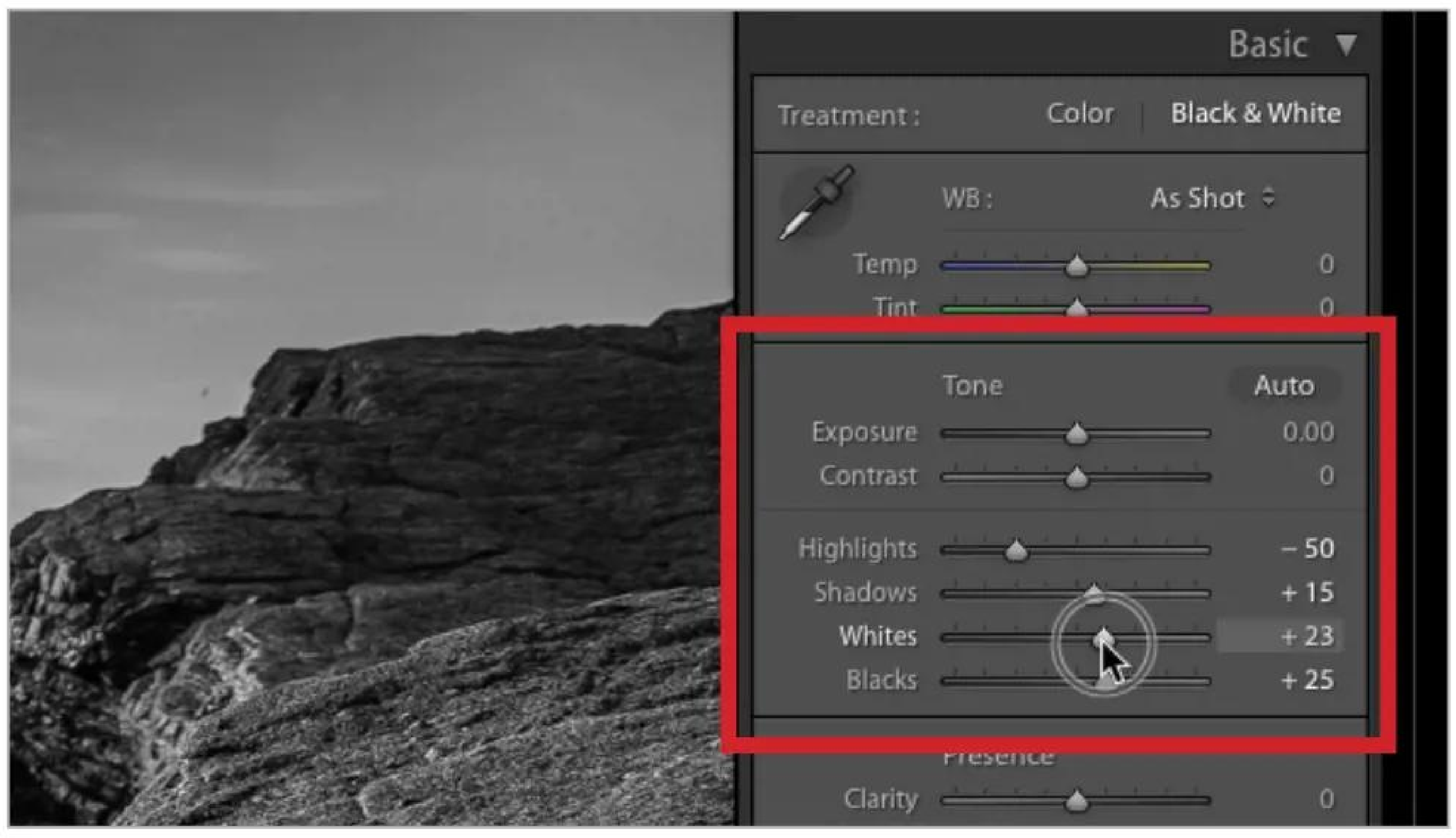
2 For quick results, Lightroom comes with a number of built-in presets for converting colour photos to monochrome. You can find them in the left-hand sidebar, not too surprisingly in the Presets tab. There are presets for B&W Filters, B&W Toned processing and also for simple B&W conversion. Let's take a closer look at these first.


Presets
Lightroom B&W Filter Presets
Lightroom B&W Presets
B&W Contrast High
B&W Contrast Low
B&W Look 1
B&W Look 2
B&W Look 3
B&W Look 4
B&W Look 5

3 Open the Presets tab and then click on Lightroom B&W Presets to see the list of available built-in options. They include high and low contrast settings, as well as five special presets that add effects such as vignetting, film grain and coloured filters. You can try these out and then undo their effects by using the History tab.

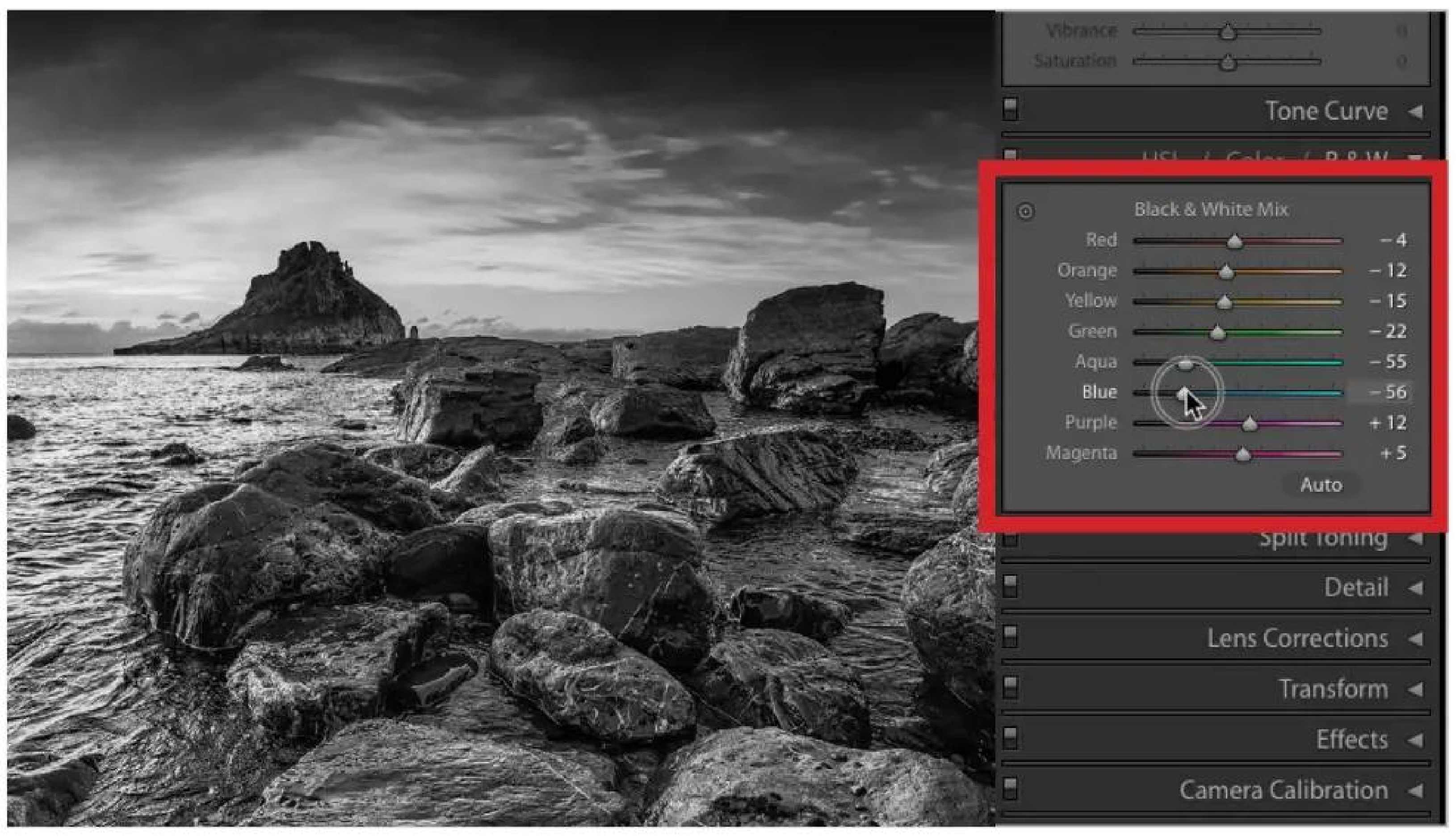

Basic
Treatment : Color Black & White
WB : As Shot
Temp 0
Tint 0
Tone Auto
Exposure 0.00
Contrast 0
Highlights – 40
Shadows – 20
Whites – 30
Blacks 0
Presence
Clarity + 30
Vibrance
Saturation
Tone Curve
HSL / Color / B & W

4 If you look at the Basic and HSL/Color/B&W tabs in the right-hand sidebar, after clicking on one of the B&W conversion presets, you can see that both instantly switch to Black & White mode and several of the sliders will move to new positions. If you click through one preset after another you'll see the sliders move each time.



Basic
Treatment: Color | Black & White
WB: As Shot
Temp 0
Tint 0
Tone Auto
Exposure 0.00
Contrast 0
Highlights − 50
Shadows + 15
Whites + 23
Blacks + 25
Presence
Clarity 0

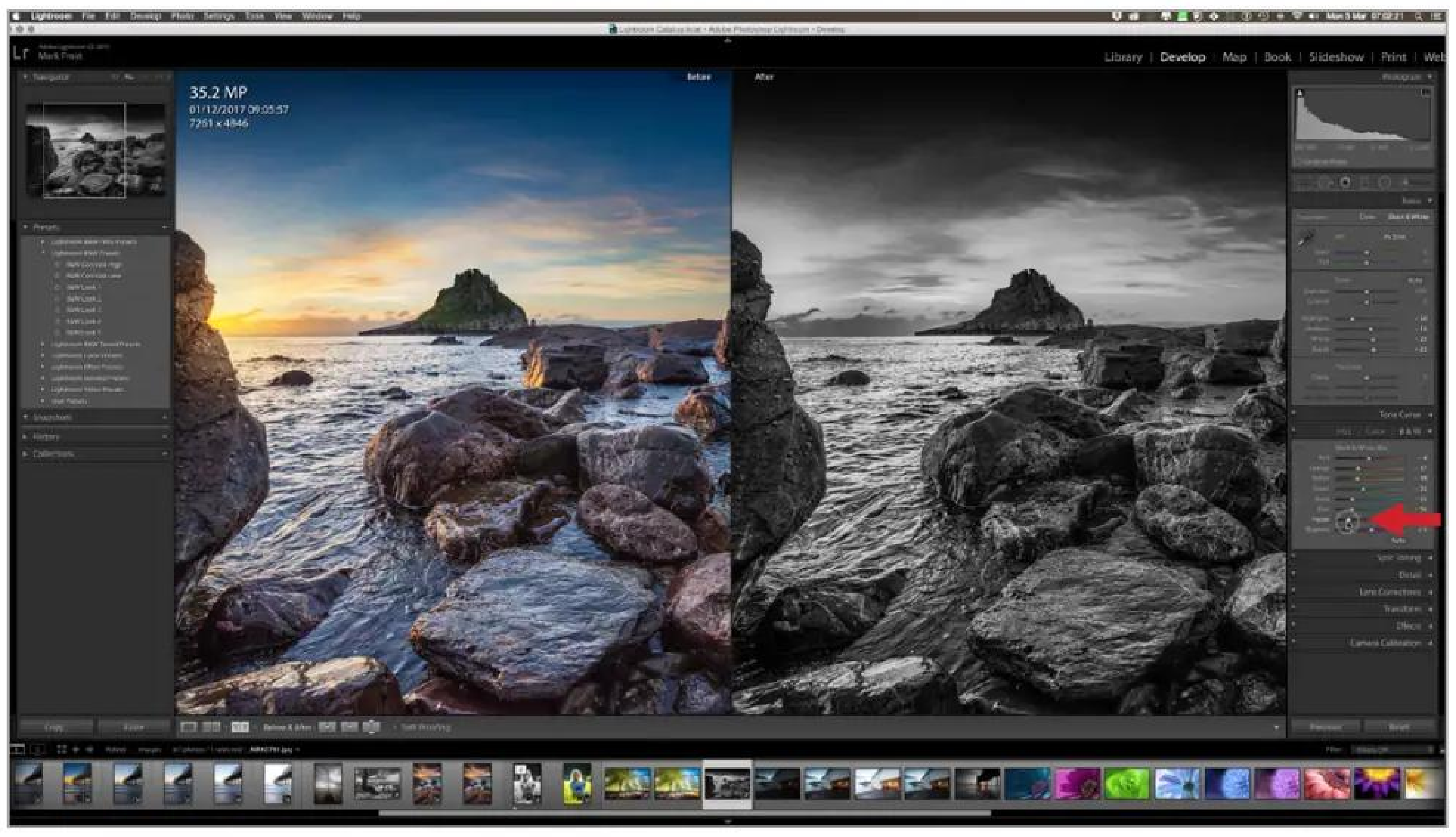
5 The best use for the presets is as a starting point for your own adjustments. For this image we'll start with the B&W Contrast High preset but then increase the lightness of the over-dark shadow areas by moving the Black, White and Shadows sliders slightly to the right. Pay attention to the histogram while making your adjustments.



Black & White Mix
Red − 4
Orange − 12
Yellow − 15
Green − 22
Aqua − 55
Blue − 56
Purple + 12
Magenta + 5

Vibrance
Saturation
Tone Curve
HSL / Color / B & W
Auto
Split Toning
Detail
Lens Corrections
Transform
Effects
Camera Calibration

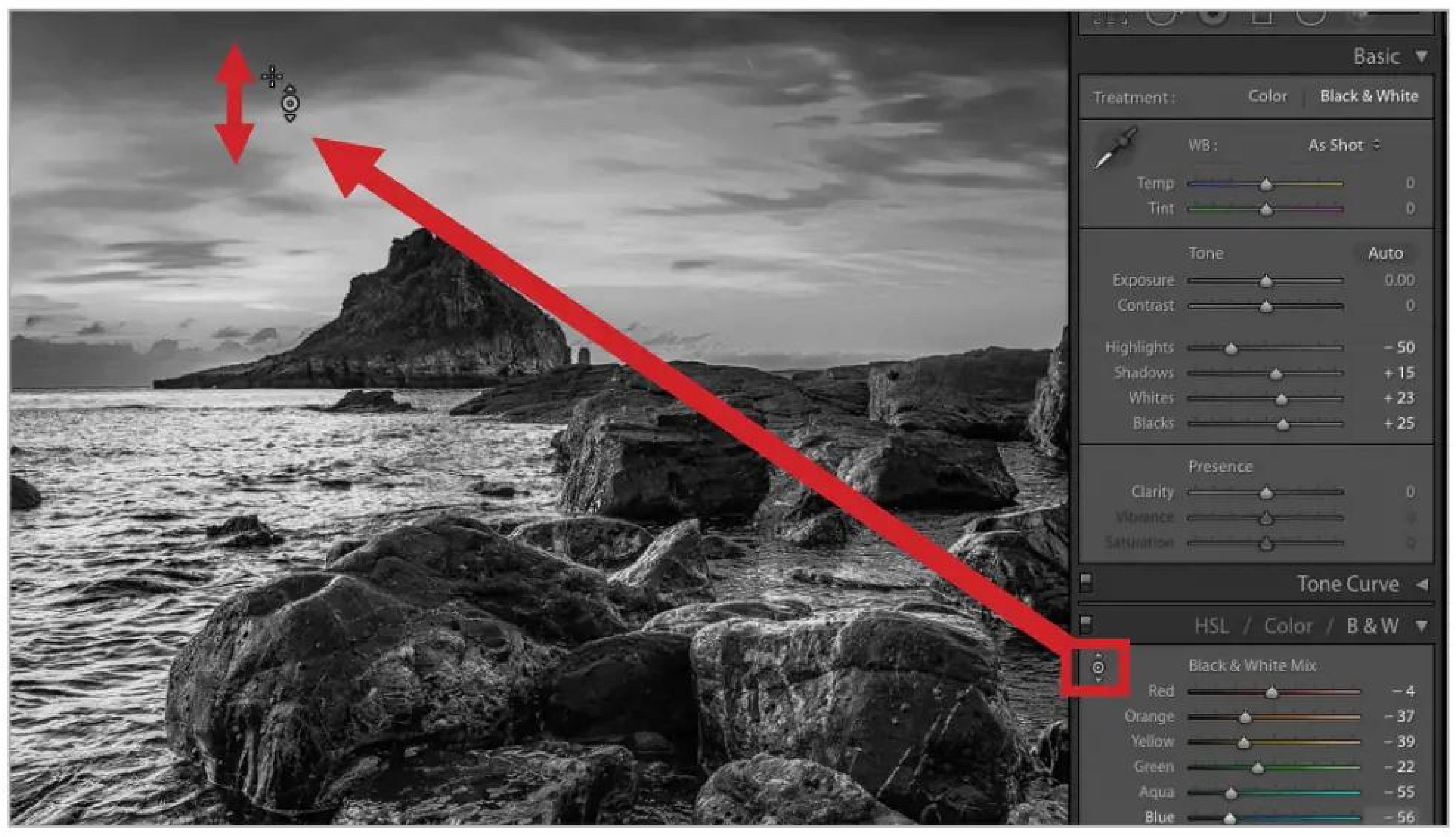
6 Photographers shooting in monochrome use coloured filters over the lens to alter the relative brightness of tones in the final image. For instance, an orange filter will darken a blue sky. We can produce the same effect by using the sliders in the B&W section of the HSL/Color/B&W tab or by using the presets in the B&W Filter Presets tab.



35.2 MP
01/12/2017 09:05:57
7261 x 4846

Before
After

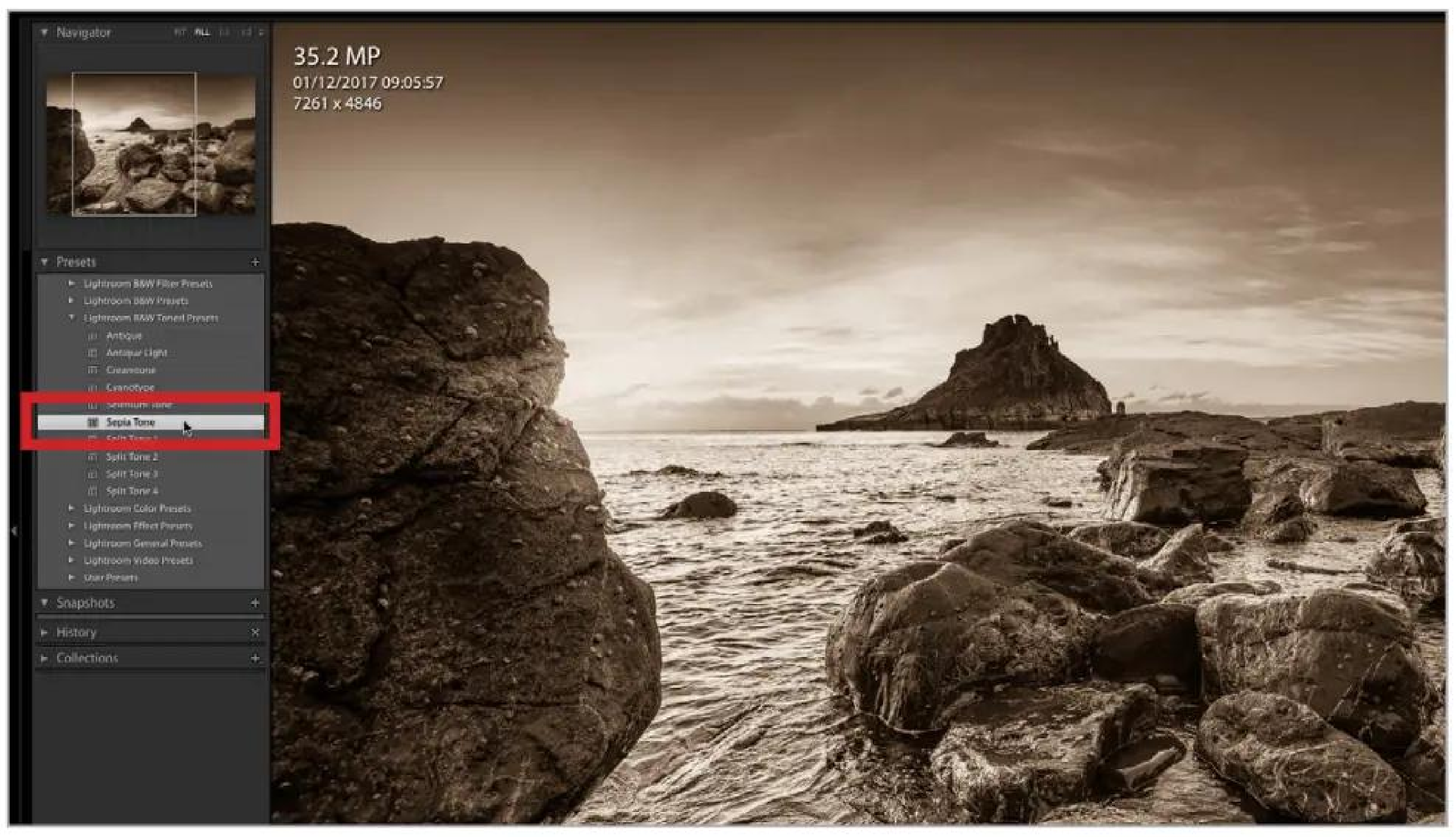
7 Before adjusting the colour filters, turn on the before-and-after spilt-screen view so that you can see which colours are where. For our example shot, reducing the level of blue by moving the slider left makes the sky look darker and more dramatic, while decreasing purple and magenta darkens the foreground rocks, making for a more balanced shot.



Basic
Treatment: Color | Black & White
WB: As Shot
Temp 0
Tint 0
Tone Auto
Exposure 0.00
Contrast 0
Highlights − 50
Shadows + 15
Whites + 23
Blacks + 25
Presence
Clarity 0
Black & White Mix
Red − 4
Orange − 37
Yellow − 39
Green − 22
Aqua − 55
Blue − 56

Tone Curve
HSL / Color / B & W

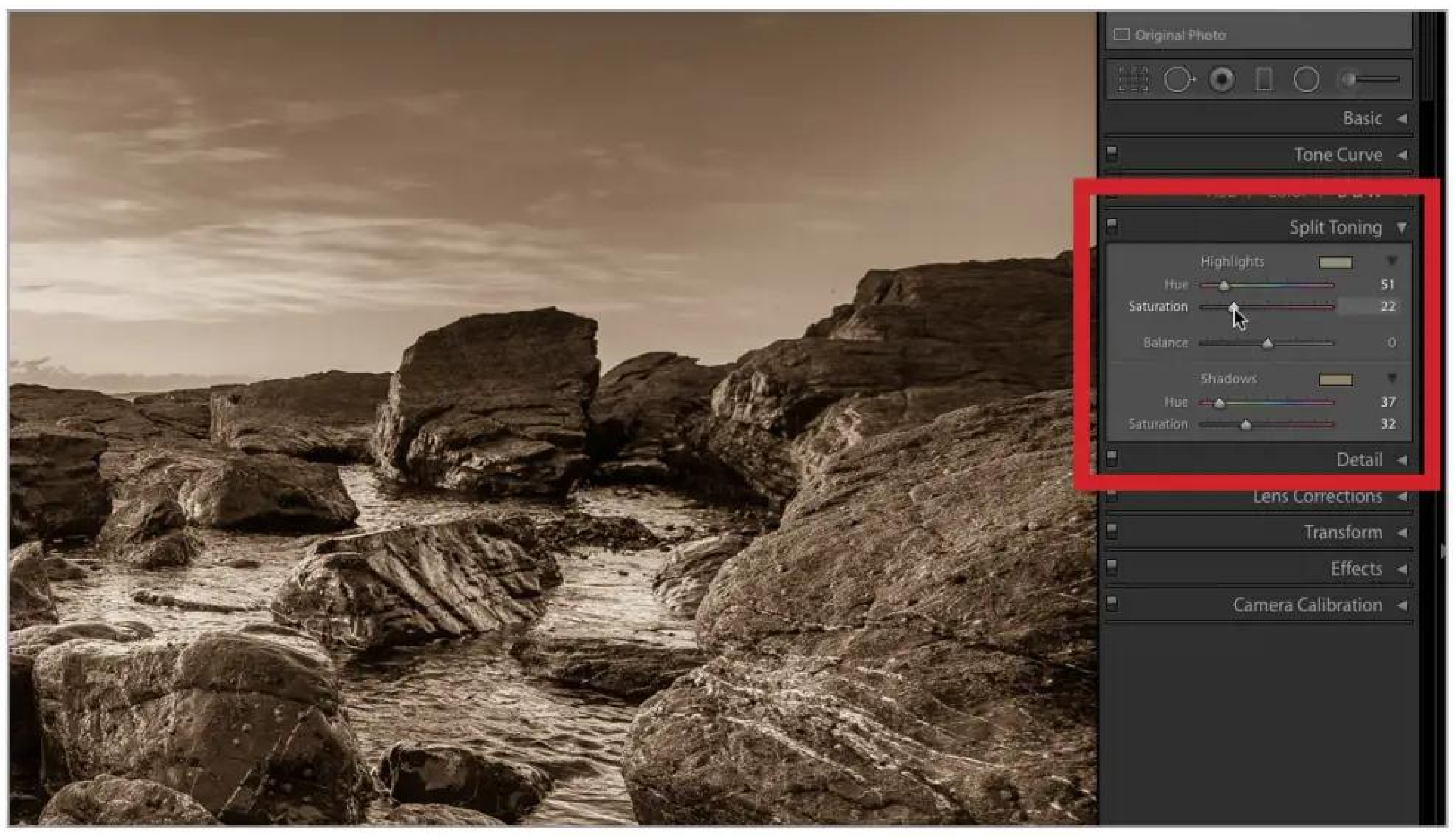
8 In the upper left corner of the HSL/Color/B&W panel you'll see a small circular icon. This is an immensely useful tool for adjusting monochrome filtering. It lets you directly adjust the tonal balance by clicking and dragging on areas of the image. Click on it, move it over to the sky and move it up and down to see the effect.



35.2 MP
01/12/2017 09:05:57
7261 x 4846

Navigator
Presets
Sepia Tone
Snapshots
History
Collections

9 Also in the Presets panel you'll find B&W Toned Presets. These replicate the effects of different traditional processing and toning methods used in darkroom photography. They work by adding subtle colours to the highlights and shadows in different ratios and can produce some beautiful effects. Sepia toning is the best known.



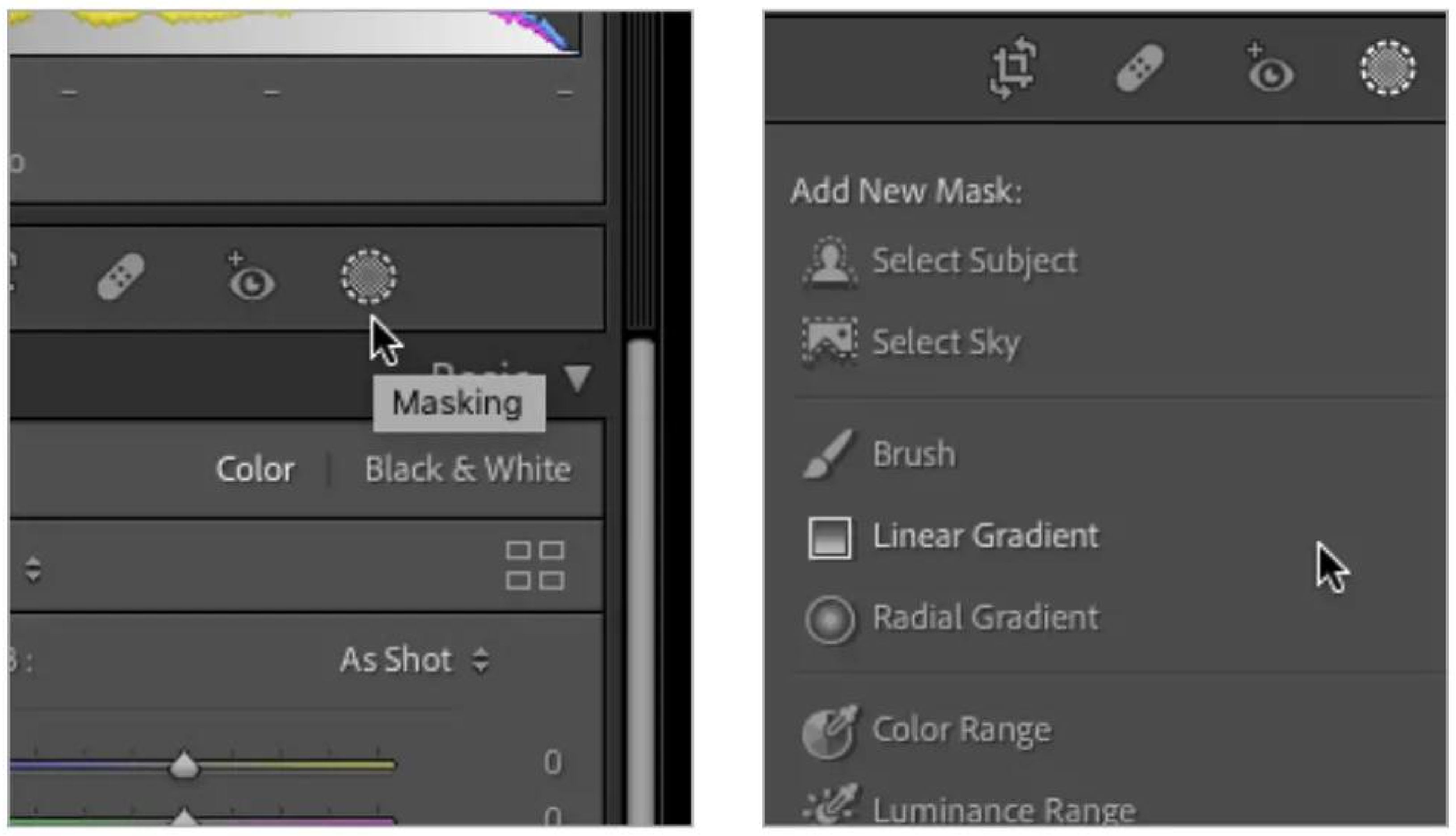
Split Toning
Highlights
Hue 51
Saturation 22
Balance 0
Shadows
Hue 37
Saturation 32

Original Photo
Basic
Tone Curve
Detail
Lens Corrections
Transform
Effects
Camera Calibration

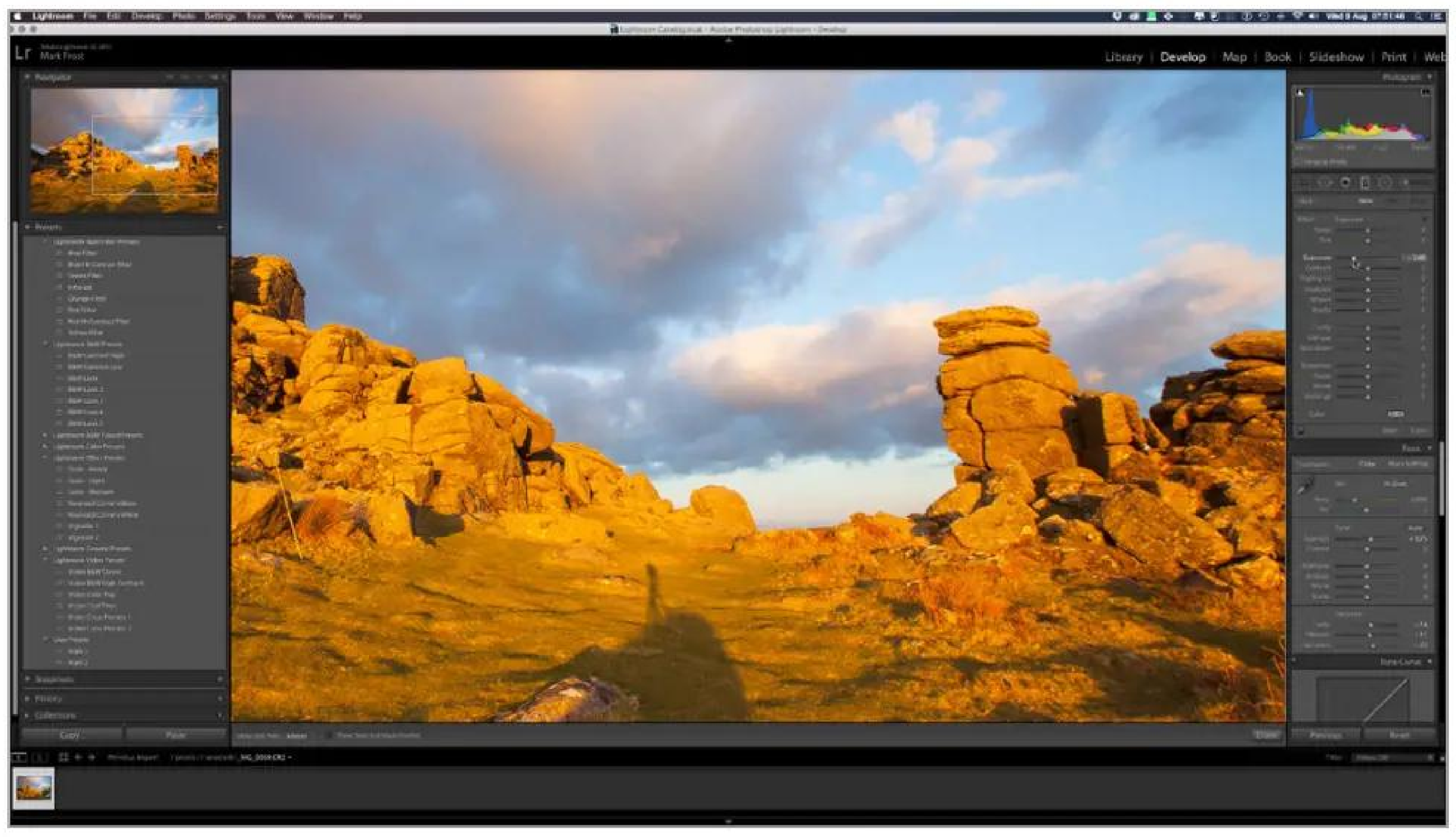
10 You can see the effect of the Tone presets if you open the Split Toning panel in the right-hand sidebar. You'll see that the sliders have moved from their defaults. For example, sepia toning applies a light yellow-brown colour to the image, with different saturations for the highlights and shadows. We'll take a closer look at Split Toning elsewhere.

Linear and Radial Gradients

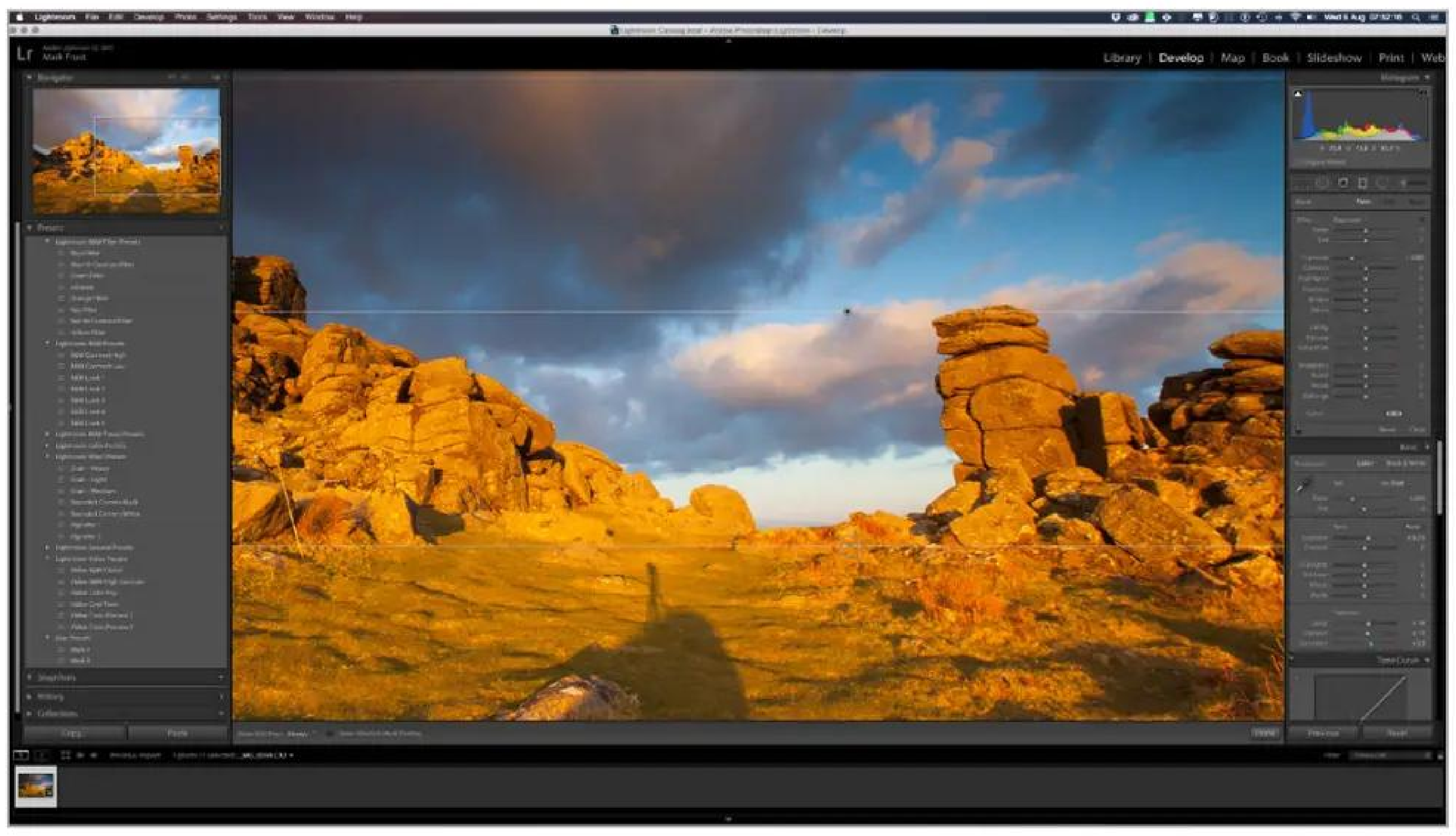
Traditional graduated filters are tinted slides, darker at one end than the other, that photographers place in front of a lens to selectively darken or add emphasis to an image. Lightroom's graduated filters do the same thing but are more powerful.



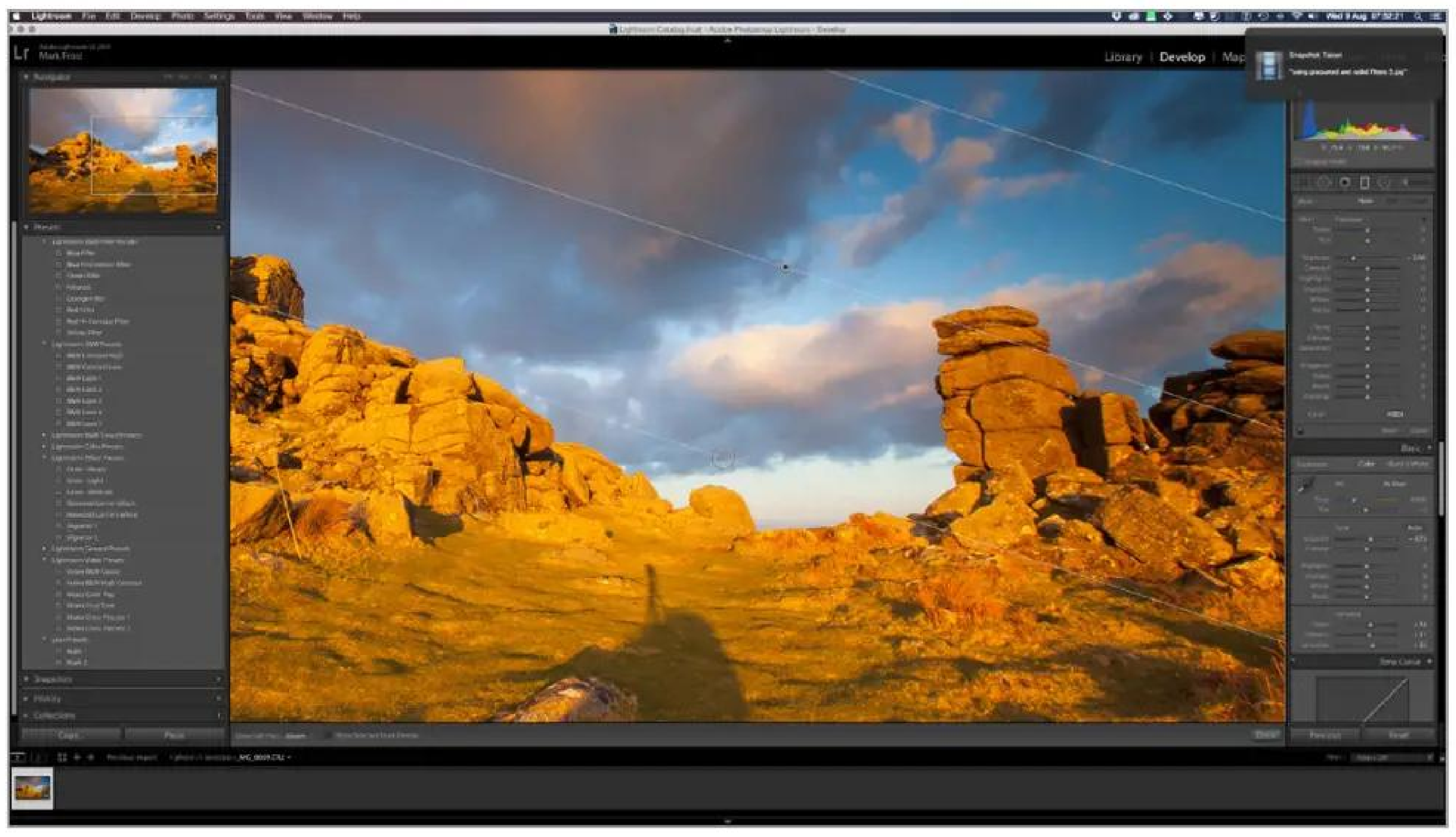
1 You can find linear and radial gradients under the new Masking icon, just below the histogram on the right-hand sidebar. In older versions of Lightroom, the Graduated filter was under the vertical rectangular icon, while the radial filters are under the circular icon to the right. Click your choice and you'll see an array of sliders for controlling the filter's effects.



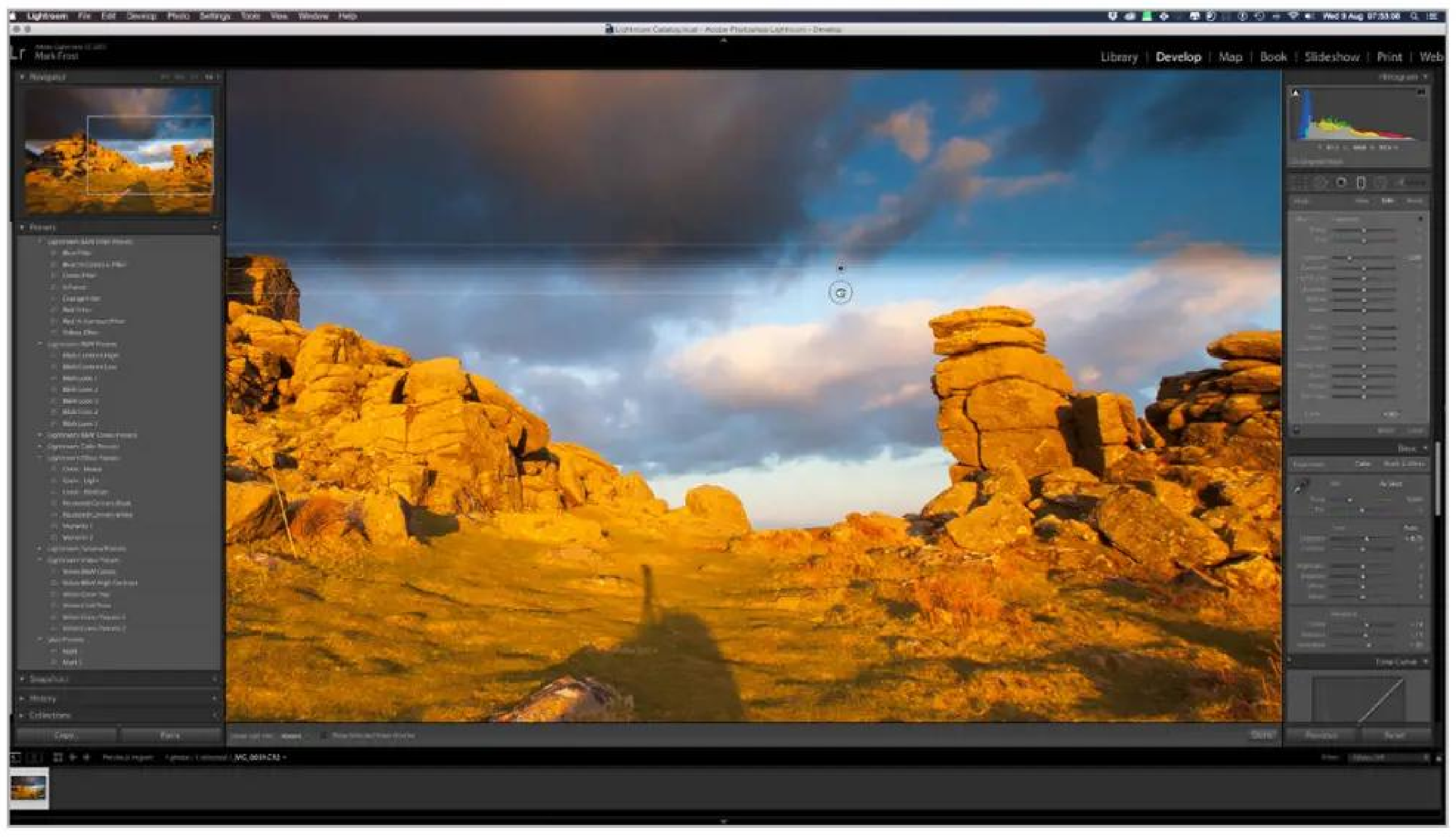
2 As you can see, Lightroom's graduated filter tool can apply a wide range of effects, far more than the simple darkening or tinting of a camera mounted filter. Start with something simple though and try to darken the sky of our example image. Locate the Exposure slider and drag it to the left until the value is -2.00.



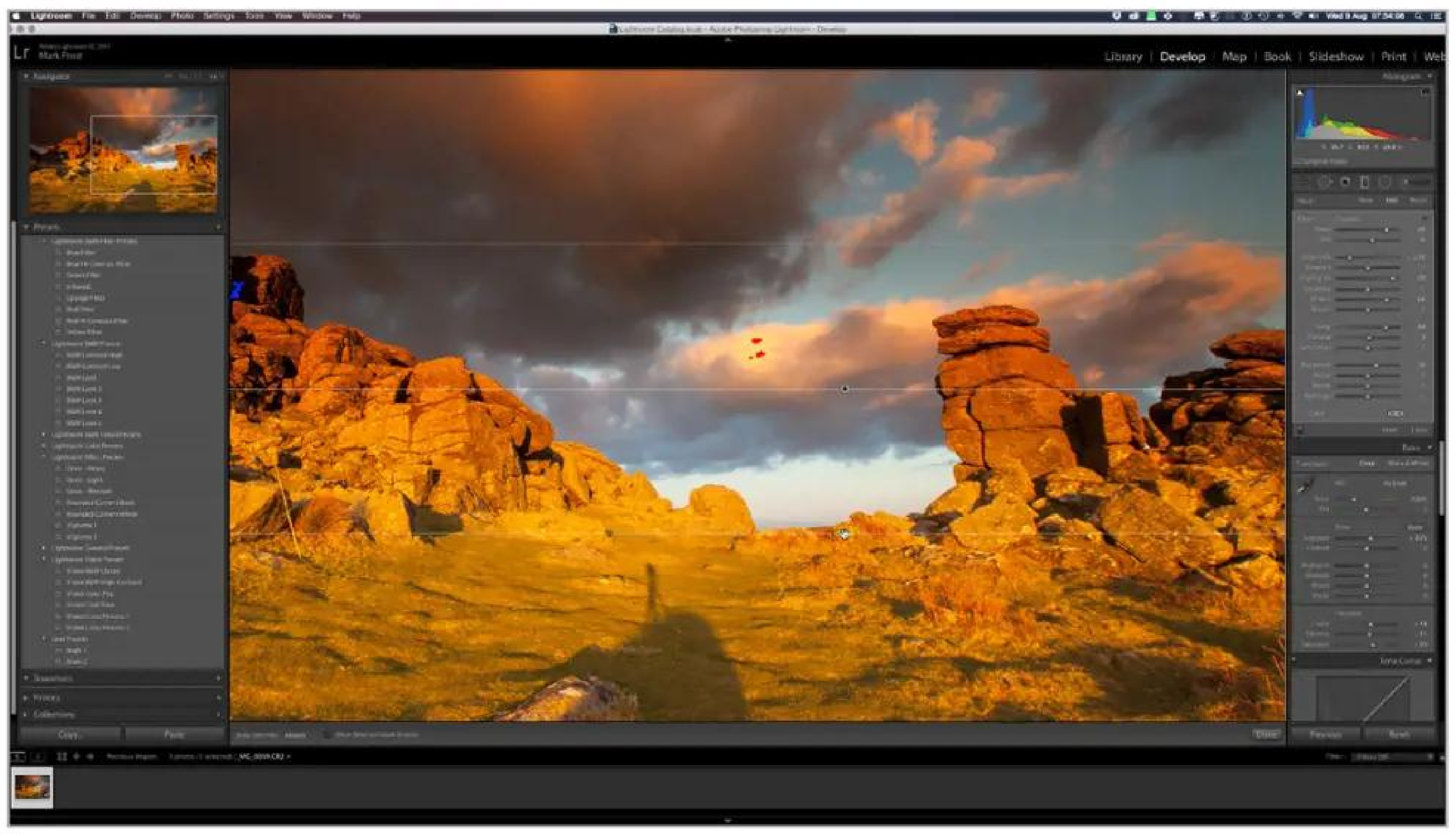
3 Click your mouse at the top of the image and drag downwards to about halfway down the frame, and you should see three horizontal lines appear with the filter effect applied between them. If you hold down the Shift button while dragging, the dragging direction will be constrained to vertical (or horizontal if you drag in from one side).



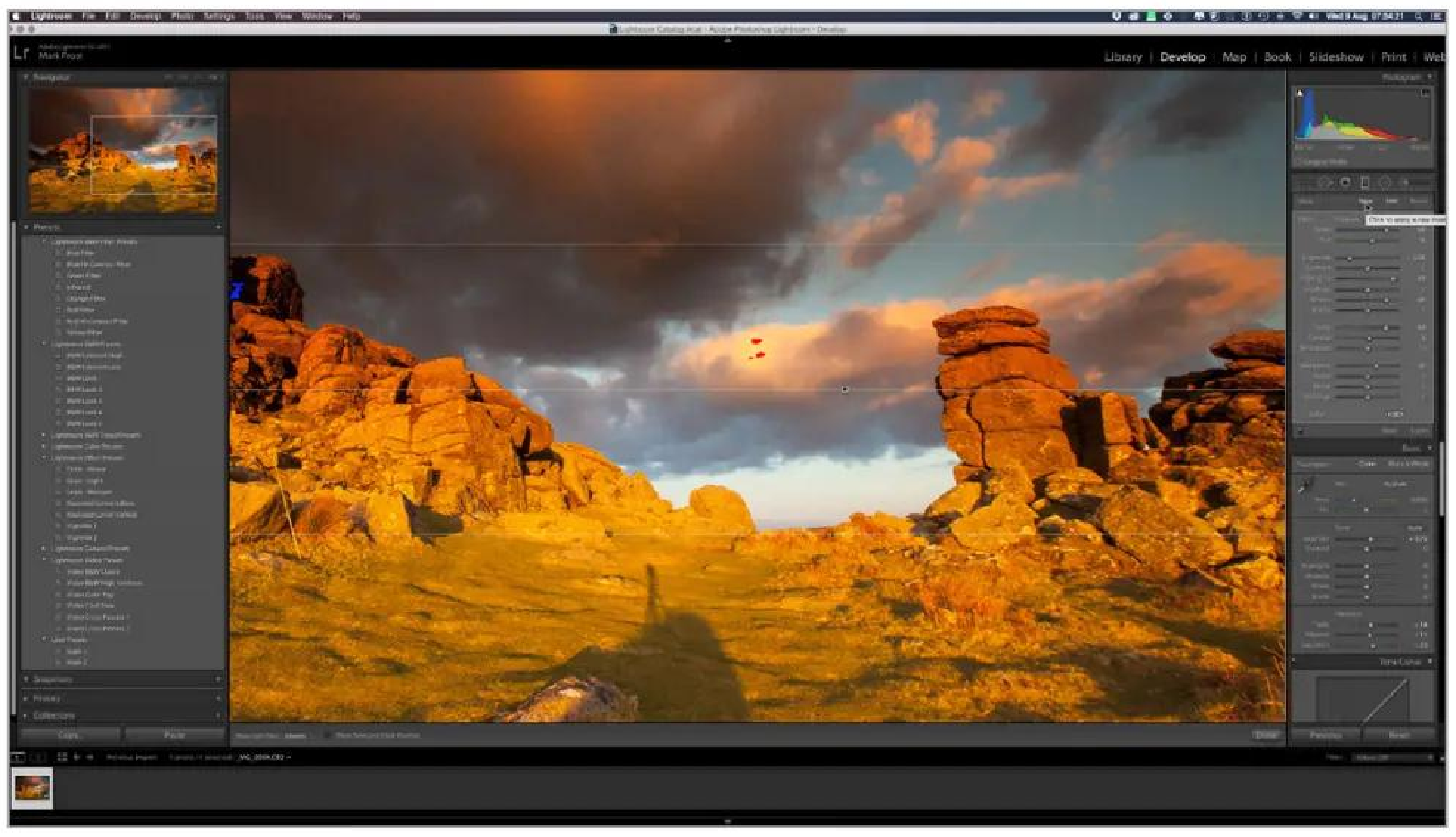
4 You can alter the positions of the filter border lines once they're in place. You can drag the top and bottom lines up and down, drag the button on the middle line to reposition all three or rotate the alignment of the filter by clicking and dragging anywhere else on the middle line. You can use these controls to customise the area affected by the filter.



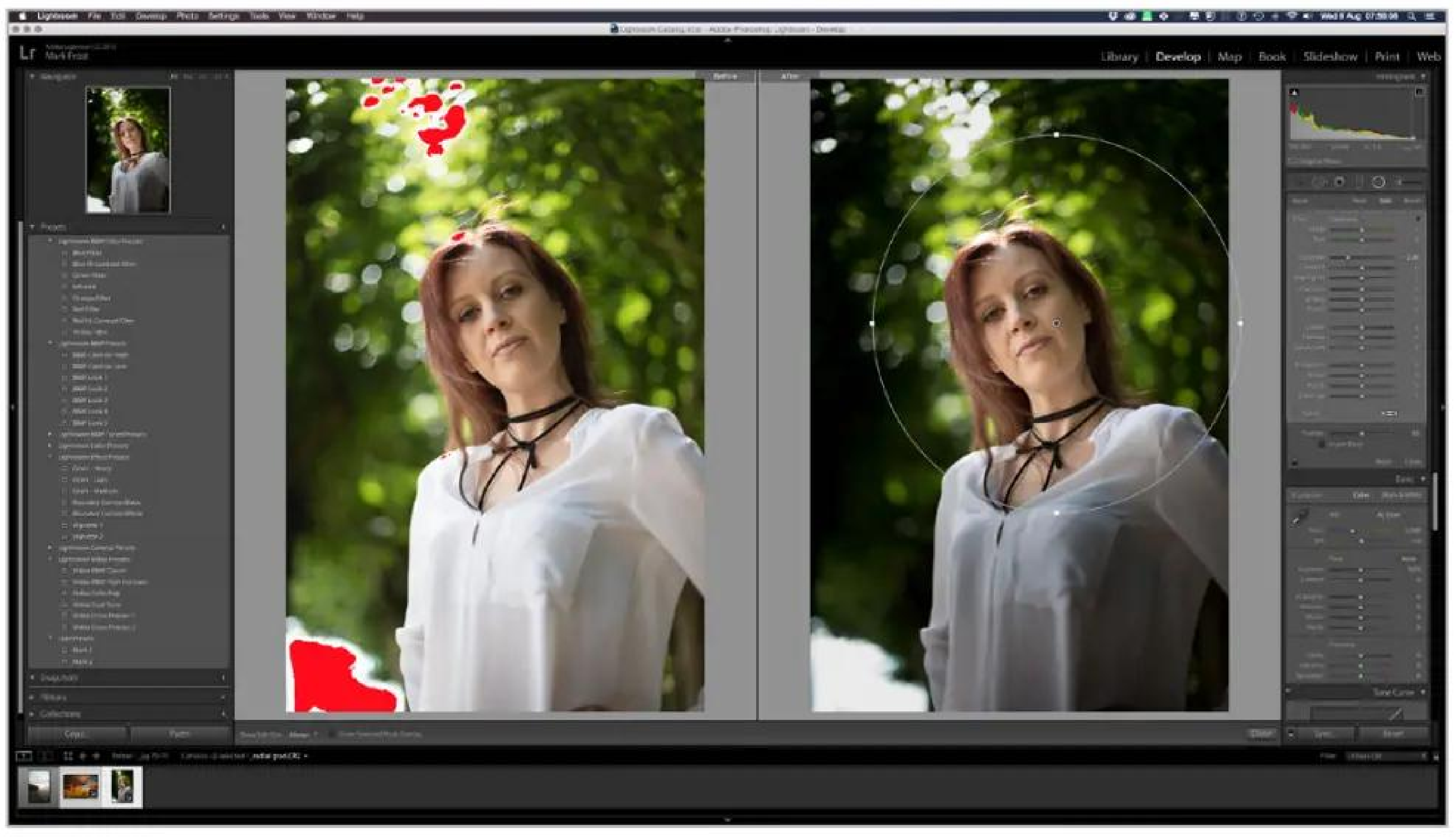
5 The graduated part of the filter effect is applied between the top and bottom lines. Above the top line the filter is in full effect, while below the bottom line there is no effect. By altering the positions of the top and bottom lines you can customise where the graduated fade is applied, even making the dividing line as narrow as you like.



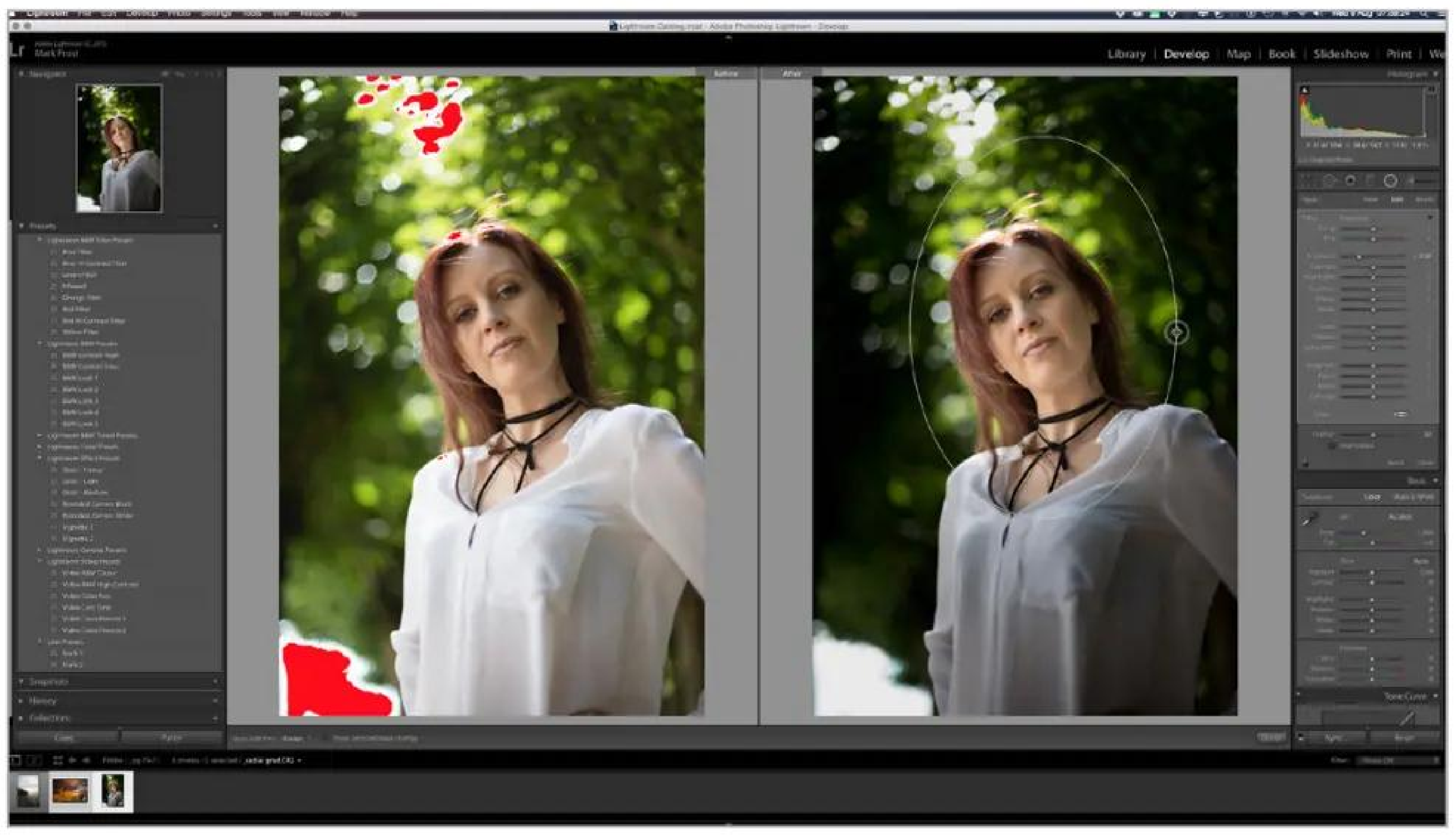
6 You can add multiple filter effects to the same graduated filter. In this example, we've reduced exposure, adjusted the white balance, boosted the highlights and increased the saturation all at once, with the effect of making the slightly dull sky more vibrant and dramatic. You can apply as many sliders as you want.



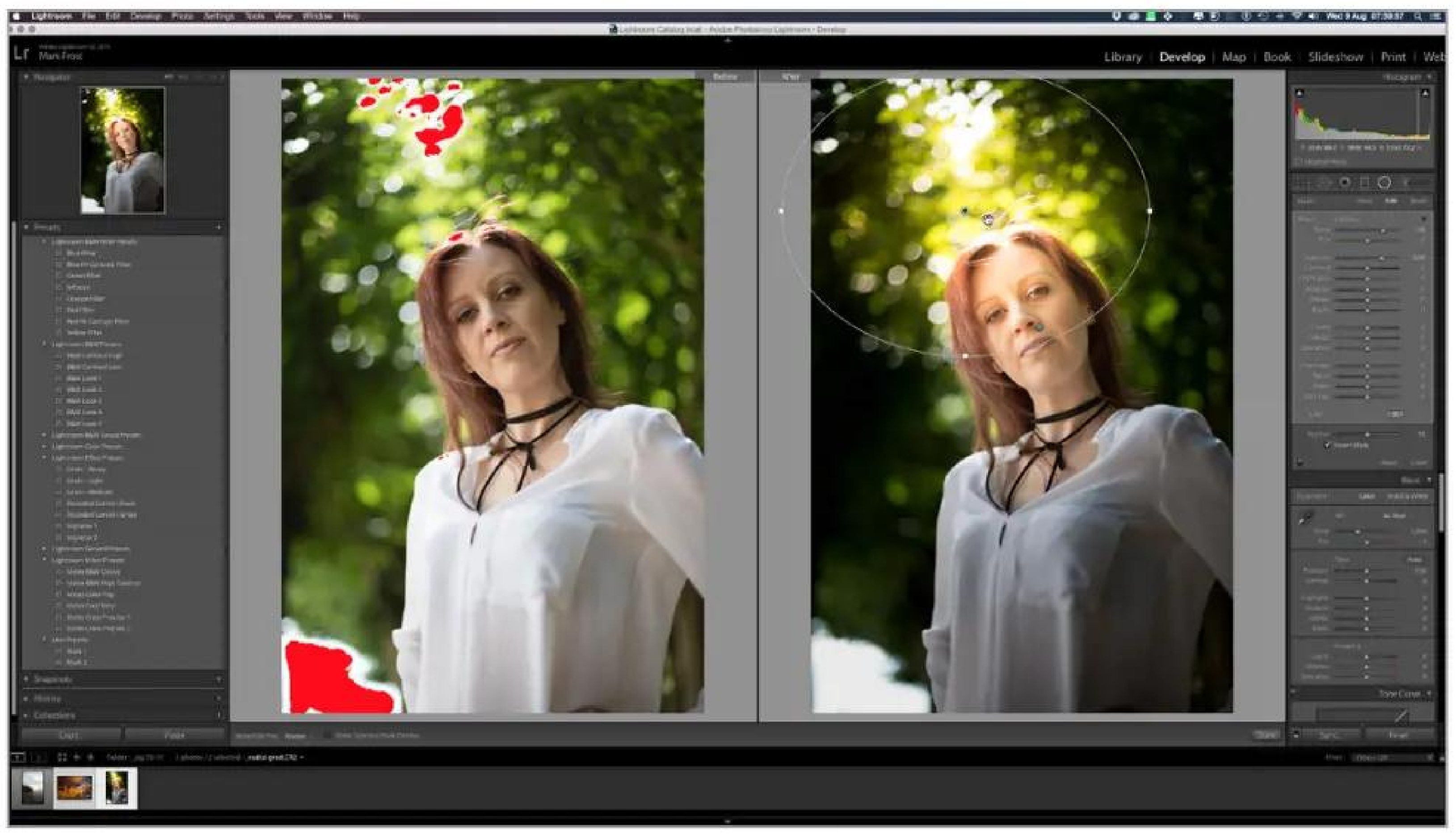
7 You can apply more than one graduated filter to the same image. To add a new filter, click on the New button at the top of the filter panel and drag a new filter onto the image, then set the sliders for that one. You can go back and edit the shape or effects of your original filter by clicking on its button on the image.



8 Radial filters work in much the same way as graduated filters, but instead of going from top to bottom or side-to-side, they are applied around a central point in an elliptical shape. To apply one, click on the radial Filter button, then click and drag outward from where you want the centre of the effect to be. An elliptical shape will follow your mouse.



9 You can alter the size or shape (although it remains an ellipse) by clicking and dragging any of the four handles that you can see on the edges of the ellipse, or reposition the entire ellipse by clicking and dragging the centre point. This way you can makes sure that the effect is centralised where you want it.



10 As with the graduated filter you can stack multiple slider effects onto the same radial filter, such as white balance changes, exposure adjustments, contrast and saturation enhancements. You can of course also combine more than one radial filter on the same image or combine radial and graduated filters together if you want to.

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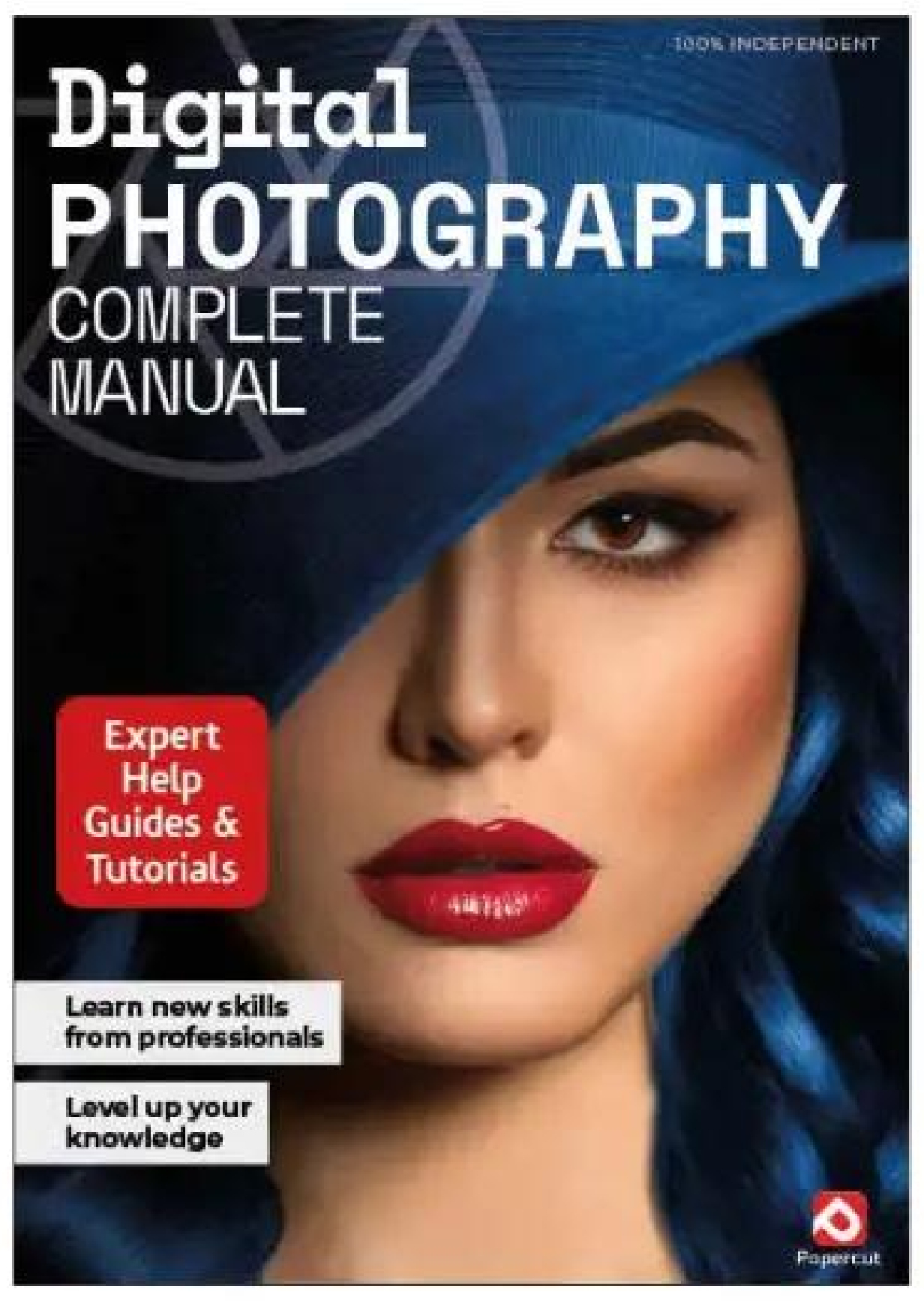
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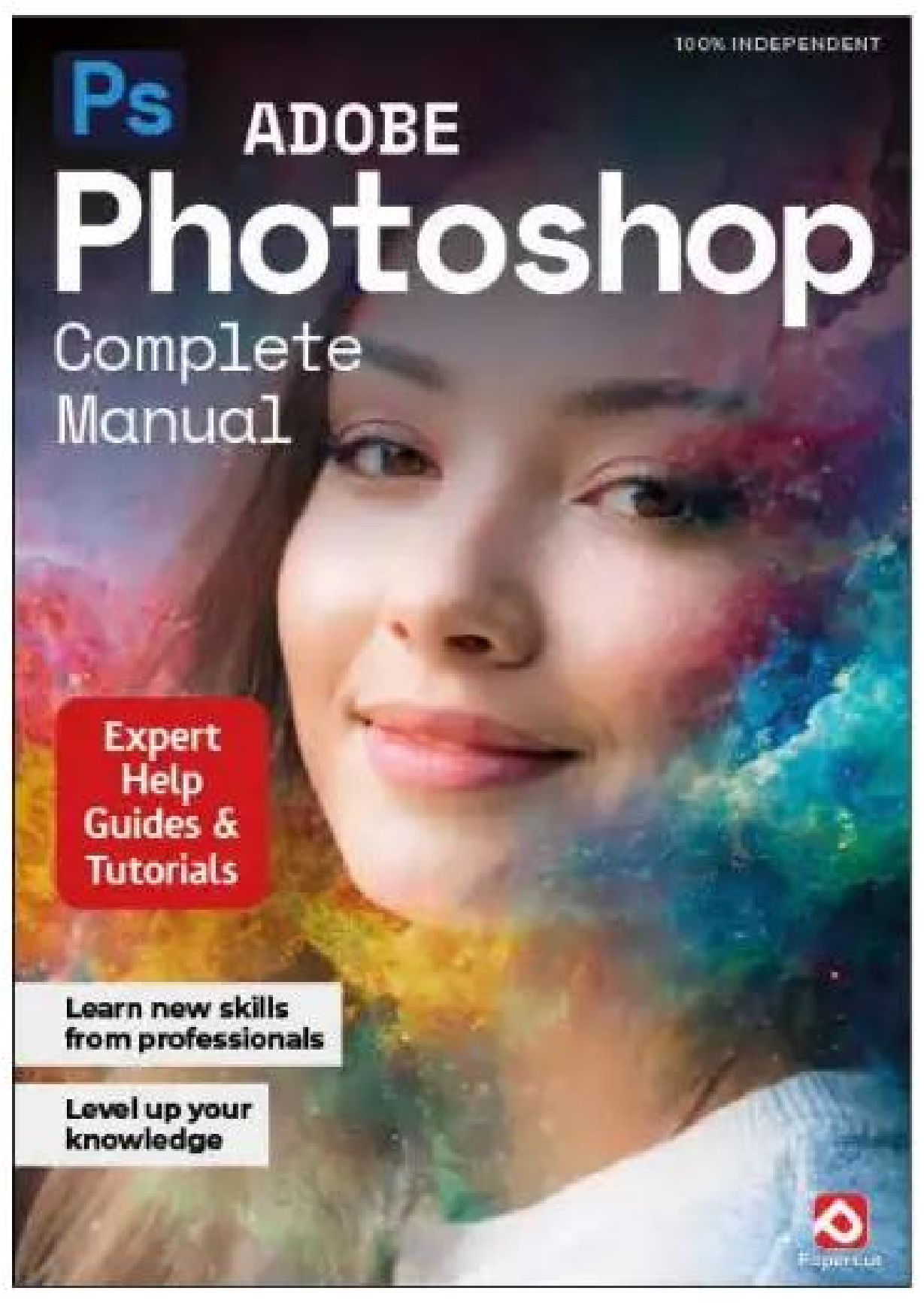
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